

EXHIBIT 3

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**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION**

**IN RE ANADARKO PETROLEUM
CORPORATION SECURITIES
LITIGATION**

Civil Action No. 4:20-cv-00576

**EXPERT REPORT
of
D. PAUL REGAN, CPA/CFF
NOVEMBER 9, 2022**

**Exhibit
515**

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I. THE NATURE OF MY ASSIGNMENT

1. I have been retained, through my employer, Hemming Morse, LLP, Certified Public Accountants, Forensic and Financial Consultants (“HM”), on behalf of Plaintiffs in this matter by Class Counsel, Robbins Geller Rudman & Dowd LLP, to provide expert opinions regarding Anadarko Petroleum Corporation’s (“Anadarko” or the “Company”) accounting for, and disclosure of, costs incurred in connection with the Company’s offshore Shenandoah exploration project (“Shenandoah”) during the respective annual and interim financial reporting periods ended December 31, 2014 through March 31, 2017 (the “Relevant Period”).¹
2. In connection with my assignment, I have been asked to assume that Plaintiffs will establish each of the following:
 - a. As of December 31, 2014 and throughout the Relevant Period, it was unlikely that the completed stratigraphic exploration well referred to as Shenandoah-3 (“Shen-3”) would be used as an injection or other type of service well in the development phase of the Shenandoah project (“Condition 1”).
 - b. The findings of the Company’s Shen-3 exploration wellbore, together with its findings of its prior wellbores, resulted in a material reduction to the estimated possible resources within the Shenandoah field as of Anadarko’s Q4 2014 financial reporting period (“Condition 2”).
 - c. By December 31, 2015, there was substantial doubt that the Shenandoah basin project (as a whole) would be economically viable (“Condition 3”).
3. Assuming these conditions, Class Counsel has asked me to opine on each of the following:

¹ I understand that the case Class Period extends from February 20, 2015 through May 2, 2017, inclusive. The “Relevant Period” as used above pertains to the respective annual and interim financial reporting periods at issue in this matter. In this regard, Anadarko released its 2014 Annual Report on Form 10-K, including its related financial statements, on February 20, 2015 and its Q1 2017 Quarterly Report on Form 10-Q including its related financial statements, on May 2, 2017.

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- a. Whether the assumed conditions as of December 31, 2014 (*i.e.*, Conditions 1 and 2) would impact the accounting treatment for the costs of drilling Shen-3 under GAAP, as consistently applied?
 - b. In consideration of Conditions 1 and 2, whether Anadarko's accounting for the costs of drilling Shen-3 complied with GAAP, as consistently applied during the Relevant Period?
 - c. Whether the accounting treatment for the costs of drilling Shen-3 under GAAP change if in contrast to Condition 1, there was a reasonable possibility that Shen-3 could have future use as an injection well or other type of service well in the development phase of the Shenandoah Project?
 - d. Whether the assumed Condition 3 would impact the accounting treatment for the exploration costs, including leasehold rights and drilling costs, relating to the Shenandoah project under GAAP, as consistently applied?
 - e. In consideration of Condition 3, whether Anadarko's accounting for the Shenandoah project-related assets complied with GAAP as of and during the respective annual and interim periods between December 31, 2015 and 2016?
4. I am performing this expert witness engagement in accordance with the American Institute of Certified Public Accountants' ("AICPA") *Statement on Standards for Forensic Services*. These standards require me to be impartial, intellectually honest, and free of conflicts of interest. As a testifying expert providing forensic services, I am also bound by the AICPA's professional standards, including the duty to act with integrity and objectivity.
 5. Consistent with those requirements, my opinions, are my present opinions and are based on the information I have considered to date. These opinions are further based on my knowledge, training, education, and experience, as well as the various evidence cited in this report. This evidence is of the type that would ordinarily be relied on by an expert in accounting and financial reporting matters. Evidence includes historical information and relevant expert testimony about the performance of the Shenandoah field, including its borewells, during the Relevant Period. During this engagement, I have considered certain

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documents. These documents are identified in **Exhibit A** and in the body and footnotes of this report.

6. In my work I have been assisted by others in my firm who have acted under my direction and control. However, the opinions in this report are my own. I recognize that I am an expert witness, not a witness of fact. My understanding of the relevant facts comes from the documents and testimony that I have considered.
7. This report should not be construed as expressing opinions on matters of law, which are outside my expertise and are for the Court to determine. However, to the extent I have interpreted contracts, court cases or other evidence, these interpretations necessarily reflect my understanding thereof from an accounting and auditing perspective.
8. I understand that this report may be made available to other parties in this litigation, to their counsel and experts, as well as to the Court. It has been prepared for use in this action. In all other respects, this report is confidential. It should not be used, reproduced, or circulated for any other purpose, in whole or in part, without my prior written consent.
9. HM is being compensated for my services at \$870 per hour. This compensation is not contingent on the outcome of this matter or the conclusions that I reach.

II. SUMMARY OF OPINIONS

10. This report is based on the evidence I have reviewed to date. I understand that additional information may become available, including but not limited to relevant opinions and analyses by the parties' experts. As a result, I may modify my opinions based on additional evidence. I also reserve the right to change my opinions in the event that Conditions 1 through 3 above are modified.
11. Based on my review and analysis of the information currently available to me, as well as my professional experience, I have formed the following opinions in this matter:
 - a. Pursuant to the "Successful Efforts Method" of accounting for exploratory drilling costs, Anadarko was required to expense the cost of drilling Shen-3 no later than as of

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and for the year ended December 31, 2014, given that Shen-3 found no hydrocarbons² and the wellbore's unlikely use as an injection or other service well;

- b. Anadarko repeatedly failed to expense and disclose millions of dollars of Shen-3 related dry-hole expenses during each of the respective annual and/or quarterly periods between December 31, 2014 and June 30, 2015, in violation of GAAP;
- c. Anadarko's Shen-3 related accounting errors and disclosure omissions caused the Company's financial statements to be materially misstated as of and for the annual and/or quarterly periods between December 31, 2014 and June 30, 2015;
- d. Anadarko's Q3 2016 assertion that the continued capitalization of Shen-3 prior to September 30, 2016 was acceptable because a "reasonable possibility" existed that the wellbore would be used as an injection well or sidetrack well is flawed and unsupported in GAAP;
- e. Given that by December 31, 2015, there was substantial doubt that the Shenandoah basin project would be economically viable, Anadarko was further required to expense Shenandoah-related suspended exploration well costs and capitalized non-producing leasehold costs no later than December 31, 2015;
- f. Anadarko repeatedly failed to expense and properly disclose Shenandoah-related suspended exploration well costs and capitalized non-producing leasehold costs during each of the respective annual and/or quarterly periods between December 31, 2015 and December 31, 2016 in violation of GAAP and SEC accounting-related reporting rules; and

² For purposes of this report, the term "hydrocarbon" is being used to be synonymous with "oil and natural gas." Notably, GAAP uses the term "Reserves" to mean the "estimated remaining quantities of oil and gas and related substances anticipated to be economically producible." ASC Master Glossary. As the absence of hydrocarbon reflects the absence of oil, this condition further reflects the absence of "reserves" under GAAP. As times in this report, I use or reference these terms (*i.e.*, hydrocarbons, oil, reserves) to convey the same underlying resources.

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- g. Anadarko's Shenandoah project-related accounting errors and disclosure omissions caused the Company's financial statements to be materially misstated as of and for the annual and/or quarterly periods between December 31, 2015 and December 31, 2016.
12. The basis for these opinions are described below in Section V of this report.

III. QUALIFICATIONS

13. My expert qualifications, including my testimony in the last four years and the publications I have authored in the past ten years, are described in greater detail in my curriculum vitae, attached as **Exhibit B**. My prior experience and education provide me with the appropriate qualifications to provide opinions in this matter.
14. I am a Certified Public Accountant ("CPA"), licensed in the State of California, and a Partner in Hemming Morse, LLP, Certified Public Accountants, Forensic and Financial Consultants in San Francisco, California. I have been a CPA continuously since 1970. My work in the accounting profession includes more than 50 years of continuous experience as an auditor or as a consultant. I have supervised and participated in audits, or the review of audits of companies' financial statements. I served as the engagement partner or concurring partner on more than 100 audits between 1975 and 1995. The largest engagement that I supervised was the audit of a public company with more than 100 subsidiaries operating throughout the world.
15. I have also provided accounting and/or auditing consulting services on more than 750 complex litigation matters. Many of these have required an extensive analysis and application of relevant GAAP, Securities and Exchange Commission ("SEC") financial reporting requirements, U.S. Generally Accepted Auditing Standards ("GAAS"), and Public Company Accounting Oversight Board ("PCAOB") Standards. I have also testified on accounting issues where the accounting standards were International Financial Reporting Standards ("IFRS"), Canadian GAAP, UK GAAP, Australian GAAP and Korean GAAP. I have performed these analyses and provided testimony for clients that include large and small companies in the private and public sector, as well as for various state and federal agencies (e.g., the Federal Deposit Insurance Corporation, Federal Home Loan Mortgage Corporation, SEC, U.S. Department of Justice, the PCAOB, Resolution Trust

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Corporation, California Department of Insurance, various Attorneys General of nineteen states, and the Department of Economic Development, an agency of the British government).

16. My experience includes the review of financial records of entities across a diverse range of industries including oil and gas companies. My consulting or expert witness experience has involved companies with operations in multiple locations in the United States, as well as in many other countries. The companies whose financial statements I have analyzed have included accounting for and disclosure of oil exploration and development costs, including those with offshore operations in the Gulf of Mexico. I have also personally owned interests in entities with working interests in oil and gas wells in Texas, Louisiana, and Oklahoma.
17. From 1976 through today, I have testified and been admitted as an expert in more than 125 trials and arbitrations and given more than 225 depositions. These cases were generally in state and federal courts in the United States. I have also testified in trials in Canada, Guam, the United Kingdom, Australia, and the International Court of Justice in the Netherlands.
18. I am a member of the California Society of Certified Public Accountants (“CalCPA”). I have served on its statewide Litigation Services Steering Committee since 1990 and I was its Chair during its 2002/2004 fiscal year terms. At that time, this Steering Committee provided guidance to the more than 800 members of its four Operating Sections: (1) Business Valuation; (2) Economic Damages; (3) Fraud; and (4) Family Law. For two and one-half years (through August of 1998), I was Chair of its 250-member Economic Damages Section. I served as Chair of the 28,000-member CalCPA during its 2004/2005 fiscal year term and in 2009, I received CalCPA’s Distinguished Service Award for a career of “extraordinary and distinguished service to the profession.”
19. I am a member of the AICPA. The AICPA had a national Forensic and Litigation Services Committee (“FLSC”) (formerly the Litigation and Dispute Resolution Subcommittee). From 1998 until July of 2001, I served as one of the nine members of this national committee. The FLSC oversaw and provided guidance to the AICPA’s then, 340,000 members relating to litigation consulting and dispute resolution. The FLSC also provided

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guidance and supervision to its subcommittees, which included the Subcommittee on Economic Damages. I served as Chairperson of the Subcommittee on Economic Damages from 1999 to July 2001.

20. From October 2003 until October 2011, I was a member of the AICPA's Governing Council. Under Rule 203 of the Code of Professional Conduct of the AICPA, this Council is the body that has the authority to designate which accounting principles constitute GAAP.
21. From August 2008 until October 2011, I served on the AICPA's Forensic and Valuation Services Executive Committee. This nine-person committee is the AICPA's standards setting body for CPAs performing forensic and valuation services. I have also been designated by the AICPA as a CFF ("Certified in Financial Forensics").

IV. BACKGROUND RELEVANT TO MY OPINIONS

22. Anadarko Petroleum Corporation is an oil and gas exploration and production company. During the Relevant Period, Anadarko's exploration and production portfolio included assets and related plays in (i) the United States, (ii) the Gulf of Mexico, and (iii) other international locations.³
23. During the Relevant Period, Anadarko's securities were publicly traded under the ticker symbol "APC" on the New York Stock Exchange. As a publicly traded entity, Anadarko was required to file periodic financial information with the SEC.
24. The predicate for SEC reporting requirements applicable to public companies like Anadarko is that "[c]ompanies offering securities for sale to the public must tell the truth about their business" and "everyone should be treated fairly and **have access to certain facts about investments.**"⁴ To achieve this objective, the SEC requires public companies **"to regularly disclose significant financial and other information so investors have the**

³ Anadarko 2014 Form 10-K, p. 2; Anadarko 2017 Form 10-K, p. 4.

⁴ *What We Do, Protecting Investors*, U.S. Securities Exchange Commission, <https://www.sec.gov/about/what-we-do#section1> (accessed November 7, 2022) (emphasis added).

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timely, accurate, and complete information they need to make confident and informed decisions about when or where to invest.”⁵

A. ANADARKO’S FINANCIAL STATEMENTS WERE REQUIRED TO COMPLY WITH GAAP, INCLUDING EXPLICIT OIL AND GAS INDUSTRY-RELATED ACCOUNTING GUIDANCE

25. Anadarko, including its executive management, was responsible for issuing the Company’s financial statements in accordance with GAAP.⁶ Rule 4-01 of SEC’s Regulation S-X specifically states that “financial statements filed with the Commission which are not prepared in accordance with generally accepted accounting principles will be presumed to be misleading or inaccurate.”⁷
26. The use of GAAP brings consistency, conformity, and over time, comparability to financial reporting.⁸ It includes not only broad guidelines of general application, but also detailed practices and procedures.⁹ Those conventions, rules, and procedures provide a standard by which to measure financial presentations. Authoritative GAAP is promulgated by the Financial Accounting Standards Board (“FASB”) and is contained within the FASB’s accounting standards codification (“ASC” or the “Codification”). Rules and interpretive releases of the SEC under the authority of federal securities laws are also sources of authoritative GAAP for SEC registrants.¹⁰
27. Of particular relevance to matters at issue, as an oil and gas exploration and production company, relevant GAAP included industry-specific accounting standards established under ASC 932, *Extractive Activities – Oil and Gas* (“ASC 932”). Amongst other provisions, ASC 932 addresses accounting and reporting for industry-specific property,

⁵ *What We Do, Protecting Investors*, U.S. Securities Exchange Commission, <https://www.sec.gov/about/what-we-do#section1> accessed November 7, 2022) (emphasis added).

⁶ PCAOB AU §110.03.

⁷ 17 CFR § 210.4-01(a)(1).

⁸ Federal Trade Commission, Informal Staff Advisory Opinion 02-4.

⁹ PCAOB AU §411.02.

¹⁰ ASC 105-10-05-01.

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plant, and equipment in the oil and gas industry, including wells and related equipment and facilities.¹¹

28. Anadarko's management repeatedly acknowledged its responsibility for preparing the Company's financial statements in accordance with GAAP. In this regard, Anadarko asserted that each of its financial statements filed with the SEC during the Relevant Period were "prepared in conformity with [GAAP]."¹²
29. In addition, Anadarko's Chairman of the Board, President and Chief Executive Officer, R. A. Walker, and Executive Vice President, Finance and Chief Financial Officer, Robert G. Gwin, certified that the Company's financial statements and other financial information included in Anadarko's respective Annual and Quarterly Reports filed with the SEC during the Relevant Period "fairly present[ed] in all material respects the financial condition, results of operations and cash flows of [Anadarko] as of, and for, the periods presented."¹³
30. Management further acknowledged its responsibility for "the fair presentation, in accordance with U.S. generally accepted accounting principles, of the consolidated

¹¹ ASC 932-360. Note: "wells and related equipment and facilities" is defined under GAAP as follows:

Wells and related equipment and facilities are often referred to in the oil and gas industry as lease and well equipment even though, technically, the property may have been acquired other than by a lease. The costs include those incurred to:

- a. Drill and equip those exploratory wells and exploratory-type stratigraphic test wells that have found proved reserves
- b. Obtain access to proved reserves and provide facilities for extracting, treating, gathering, and storing the oil and gas, including the drilling and equipping of development wells and development-type stratigraphic test wells (whether those wells are successful or unsuccessful) and service wells.

¹² Anadarko 2014 Form 10-K, p. 93; Anadarko 2015 Form 10-K, p. 91; Anadarko 2016 Form 10-K, p. 91; Anadarko Q1 2015 Form 10-Q, p. 7; Anadarko Q2 2015 Form 10-Q, p. 7; Anadarko Q3 2015 Form 10-Q, p. 7; Anadarko Q1 2016 Form 10-Q, p. 7; Anadarko Q2 2016 Form 10-Q, p. 7; Anadarko Q3 2016 Form 10-Q, p. 7; Anadarko Q1 2017 Form 10-Q, p. 8.

¹³ Anadarko 2014 Form 10-K, Exhibits 31(i) and 31(ii); Anadarko 2015 Form 10-K, Exhibits 31(i) and 31(ii); Anadarko 2016 Form 10-K, Exhibits 31(i) and 31(ii); Anadarko Q1 2015 Form 10-Q, Exhibits 31(i) and 31(ii); Anadarko Q2 2015 Form 10-Q, Exhibits 31(i) and 31(ii); Anadarko Q3 2015 Form 10-Q, Exhibits 31(i) and 31(ii); Anadarko Q1 2016 Form 10-Q, Exhibits 31(i) and 31(ii); Anadarko Q2 2016 Form 10-Q, Exhibits 31(i) and 31(ii); Anadarko Q3 2016 Form 10-Q, Exhibits 31(i) and 31(ii); Anadarko Q1 2017 Form 10-Q, Exhibits 31(i) and 31(ii).

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financial statements, including disclosures, schedules, and interim financial information and all representations contained therein” to its external auditors, KPMG LLP.¹⁴ In this regard, Mr. Walker, Mr. Gwin and Anadarko’s Vice President, Chief Accounting Officer, and Controller, Chris Champion, represented to KPMG LPP that Anadarko’s respective consolidated annual and interim financial statements were “fairly presented in conformity with U.S. GAAP.”¹⁵ Of further relevance, Anadarko represented the following with respect to its accounting for “exploratory drilling work in process” and “dry hole expense” during the Relevant Period:

Based on current development plans and existing lease lives at [Date], the Company has evaluated its unproved property in accordance with FASB Topic ASC 932, Extractive Activities ~ Oil and Gas, and concluded that no additional impairment is necessary. ...

* * *

We have reviewed the status of exploratory drilling work in progress through the date of this letter and appropriately recorded dry hole expense

¹⁴ See, e.g., Anadarko Engagement Letter dated March 30, 2015, APC-01699536 at 9631; Anadarko Engagement Letter dated March 22, 2016, APC-01396003 at 6043; Anadarko Management Representation Letter dated February 20, 2015, APC-01751288 at 1303, Anadarko Management Representation Letter dated February 17, 2017, KPMG_APC_eA_0008355 at 8367. **Note:** Despite any inference to the contrary as a result of KPMG’s audits and its unqualified audit opinions, Anadarko management was solely responsible for the fair presentation of its financial statements. In this regard, professional auditing standards recognize that because an entity’s transactions and the related assets, liabilities, and equity are within the direct knowledge and control of management, the auditor’s knowledge of such matters and internal control is limited to that acquired during an audit. In this regard, PCAOB auditing standards recognize that an auditor is unable to provide absolute assurance that a company’s financial statements are free of material misstatement. As such, even if KPMG’s audits during the Relevant Period were performed in accordance with PCAOB auditing standards (an opinion which I am not offering), those same standards explicitly recognize that “a properly planned and performed audit may not detect a material misstatement.” PCAOB AS §1001, 1015.

¹⁵ See, e.g., Anadarko Management Representation Letter dated May 4, 2015, APC-01699536 at 9642; Anadarko Management Representation Letter dated July 28, 2015, APC-01699656; Anadarko Management Representation Letter dated May 2, 2016, APC-01396003 at 6046; Anadarko Management Representation Letter dated July 26, 2016, APC-01396065 at 6065; Anadarko Management Representation Letter dated October 31, 2016, KPMG_APC_eA_0007566 at 7566; Anadarko Management Representation Letter dated February 17, 2017, KPMG_APC_eA_0008355 at 8355; Anadarko Management Representation Letter dated May 2, 2017, KPMG_APC_0027263 at 7428.

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... in accordance with FASB ASC Topic 932, *Extractive Activities – Oil and Gas* [“ASC 932”].¹⁶

31. As described further below, ASC 932 includes relevant GAAP for the accounting matters at issue in this case. Although certain amendments to ASC 932 have been adopted, Statement of Financial Accounting Standards No. 19, *Financial Accounting and Reporting by Oil and Gas Producing Companies*, as issued in 1977 (“FAS 19”), serves as the primary source for relevant codified accounting standards applicable to Anadarko.¹⁷

B. OVERVIEW OF THE SHENANDOAH PROJECT

32. During 2008, Anadarko participated in oil exploration activities within the Shenandoah basin located in the Gulf of Mexico. In early 2009, the Company announced the results of its initial discovery exploration well, Shenandoah-1 (“Shen-1”). Following certain regulatory delays, Anadarko continued its Shenandoah exploration activities during 2012. In March 2013, the Company announced the results from its second exploration well, Shenandoah-2 (“Shen-2”), including the following disclosure:

The Company-operated Shenandoah-2 well (30% working interest) reached total depth in January 2013, encountering more than 1,000 net feet of oil pay in multiple high-quality Lower Tertiary reservoirs. Similar to the initial Shenandoah discovery, well log and pressure data from the Shenandoah-2 well indicated excellent-quality reservoir and fluid properties. The targeted pay sands were full of oil with no oil-water contact.¹⁸

¹⁶ Anadarko Management Representation Letter dated February 20, 2015, APC-01751288 at 1296, and 1301 (also notes: “The Company has accounted for its oil and gas producing activities in accordance with FASB ASC 932, *Extractive Activities - the Oil and Gas*.”); Anadarko Management Representation Letter dated February 17, 2017, KPMG_APC_eA_0008355 at 8362-8363, 8365. *See also* Anadarko Management Representation Letter dated May 4, 2015, APC-01699536 at 9649; Anadarko Management Representation Letter dated July 28, 2015, APC-01699656 at 9663; Anadarko Management Representation Letter dated May 2, 2016, APC-01396003 at 6053; Anadarko Management Representation Letter dated July 26, 2016, APC-01396065 at 6073; Anadarko Management Representation Letter dated October 31, 2016, KPMG_APC_eA_0007566 at 7574; Anadarko Management Representation Letter dated May 2, 2017, KPMG_APC_0027263 at 7436. **Note:** The first noted paragraph appeared in both the February 20, 2015 and February 17, 2017 representation letters, while the second paragraph appeared in all cited representation letters.

¹⁷ *See, e.g.*, Reserve and Resources Manual, APC-00001289.

¹⁸ Anadarko 2013 Form 10-K, p. 9.

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33. During 2014 and the remainder of the Relevant Period, the Company continued to undertake exploration activities within the Shenandoah basin, including drilling. In this regard, Anadarko drilled various additional exploratory-type wells including Shen-3 (spud in Q2 2014), Shenandoah-4 (spud in Q2 2015), Shenandoah-5 (spud in Q1 2016) and Shenandoah-6 (spud in Q4 2016).¹⁹
34. Anadarko's working interest in the Shenandoah exploration project varied between 30% and 33% during the Relevant Period. In this regard, Anadarko was one of several partners participating in these exploration activities. These partners included ConocoPhillips Company ("Conoco" or "COP") and Marathon Oil Corporation ("Marathon"). Anadarko was the Operator while Conoco, Marathon and the other partners were partners in the joint venture.²⁰
35. Anadarko had recorded and reported suspended well costs and other exploration costs associated with the Shenandoah basin project on its respective balance sheets included within the Relevant Period. These amounts ranged in value from between \$684.1 million and \$786.6 million of Shenandoah related assets within its balance sheet December 31, 2014 and December 31, 2016.²¹
36. As of March 31, 2017, Anadarko wrote off costs totaling \$901.5 million associated with its Shenandoah exploration project, including suspended well costs, non-producing leasehold costs and other related amounts. In connection with its Q1 2017 financial statements, Anadarko made certain disclosures in connection with this accounting treatment, including the following:

¹⁹ Anadarko 2014 Form 10-K, p. 9; Anadarko 2015 Form 10-K, p. 10; Anadarko 2016 Form 10-K, p. 11.

²⁰ Deposition of Ernest Leyendecker, 211:16-23 and 224:14-20.

²¹ 2016.12.31 GG.4.A.8.10 SW AGING AND NET CHANGE, KPMG_APC_0008143; 2016.09.30 Q3.GG.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0007376; 2016.06.30 Q2.GG.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0007189; 2016.01.19 GG.4.A.8.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0006098; 2016.12.31 GG.4.B.1.10 NPLH ROLLFORWARD, KPMG_APC_eA_0007983; 2016.03.31 Q1.GG.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0007094; 2014.12.31 GG.4.B.1.10 Q4 NPLH ROLLFORWARD, KPMG_APC_eA_0002543; 2014.12.31 GG.4.A.8.10 SW AGING, KPMG_APC_eA_0002531.

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During the three months ended March 31, 2017, the Company expensed suspended exploratory well costs of \$435 million related to the Shenandoah project in the Gulf of Mexico, including \$267 million previously capitalized for a period greater than one year. The Shenandoah-6 appraisal well and subsequent sidetrack, which completed appraisal activities in April 2017, did not encounter the oil-water contact in the eastern portion of the field. Given the results of this well and the present commodity-price environment, the Company has currently suspended further appraisal activities. Accordingly, the Company determined that the Shenandoah project no longer satisfies the accounting requirements for the continued capitalization of the exploratory well costs.

* * *

The Company recognized \$532 million of impairments of unproved Gulf of Mexico properties during the three months ended March 31, 2017, of which \$467 million related to the Shenandoah project. The unproved property balance related to the Shenandoah project originated from the purchase price allocated to Gulf of Mexico exploration projects from the acquisition of Kerr-McGee Corporation in 2006.²²

V. BASES FOR MY OPINIONS

37. As stated above, based on my review and analysis of the information currently available to me, as well as my professional experience and the assumed Conditions set forth above by Plaintiffs, I have formed the following opinions in this matter:
- a. Pursuant to the “Successful Efforts Method” of accounting for exploratory drilling costs, Anadarko was required to expense the cost of drilling Shen-3 no later than as of and for the year ended December 31, 2014, given that Shen-3 found no hydrocarbons and the wellbore’s unlikely use as an injection or other service well;
 - b. Anadarko repeatedly failed to expense and disclose millions of dollars of Shen-3-related dry-hole expenses during each of the respective annual and/or quarterly periods between December 31, 2014 and June 30, 2015, in violation of GAAP;
 - c. Anadarko’s Shen-3 related accounting errors and disclosure omissions caused the Company’s financial statements to be materially misstated as of and for the annual and/or quarterly periods between December 31, 2014 and June 30, 2015;

²² Anadarko Q1 2017 Form 10-Q, pp. 12-13.

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- d. Anadarko's Q3 2016 assertion that the continued capitalization of Shen-3 prior to September 30, 2016 was acceptable because a "reasonable possibility" existed that the wellbore would be used as an injection well or sidetrack well is flawed and unsupported in GAAP;
 - e. Given that by December 31, 2015, there was substantial doubt that the Shenandoah project would be economically viable, Anadarko was further required to expense Shenandoah-related suspended exploration well costs and capitalized non-producing leasehold costs no later than December 31, 2015;
 - f. Anadarko repeatedly failed to expense and disclose Shenandoah-related suspended exploration well costs and capitalized non-producing leasehold costs during each of the respective annual and/or quarterly periods between December 31, 2015, and December 31, 2016, in violation of GAAP; and
 - g. Anadarko's Shenandoah project-related accounting errors and disclosure omissions caused the Company's financial statements to be materially misstated as of and for the annual and/or quarterly periods between December 31, 2015, and December 31, 2016.
38. The bases for each of these opinions are described hereafter.
- A. GAAP REQUIRED THAT ANADARKO EXPENSE SHEN-3 DRILLING COSTS FOLLOWING THE DETERMINATION THAT SHEN-3 FOUND NO HYDROCARBONS AND WAS UNLIKELY TO BE USED AS A SERVICE WELL AS PART OF A SHENANDOAH DEVELOPMENT PHASE**
39. Relevant GAAP requires that the capitalized cost of drilling exploratory wells²³ and exploratory-type stratigraphic wells²⁴ be immediately expensed once it is determined that

²³ GAAP defines an "exploratory well" as "a well drilled to find a new field or to find a new reservoir in a field previously found to be productive of oil or gas in another reservoir. Generally, an exploratory well is any well that is not a development well, a service well, or a stratigraphic test well." ASC Master Glossary.

²⁴ GAAP defines a "stratigraphic test well" as "a drilling effort, geologically directed, to obtain information pertaining to a specific geologic condition. Such wells customarily are drilled without the intention of being completed for hydrocarbon production. This classification also includes tests identified as core tests and all types of expendable holes related to hydrocarbon exploration. Stratigraphic tests are classified as *exploratory-type* if not drilled in a proved area or *development-type* if drilled in a proved area." ASC Master Glossary.

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the completed well finds no hydrocarbons. Evidence reflects that the completed stratigraphic exploration well, Shen-3, found no hydrocarbons prior to the release of the Company's 2014 Annual Report on Form 10-K (February 20, 2015). Indeed, Shen-3 was contemporaneously described by Anadarko employees and Shenandoah business partners as a "wet well" or "dry hole" (*i.e.*, no hydrocarbons were found).²⁵ Accordingly, Anadarko was required to expense the cost of drilling Shen-3 within the Company's annual and quarterly period ended December 31, 2014, as detailed below.²⁶

40. Anadarko's required expensing of Shen-3 drilling costs under GAAP is further supported by the Company's unlikely use of Shen-3 as an injection well (*i.e.*, Condition 1). In this regard, costs that do not relate to probable future economic benefit are normally not capitalized under GAAP during the Relevant Period.²⁷ As described further below and consistent with Condition 1, I am not aware of contemporaneous objective information demonstrating that as of the filing date, February 20, 2015, of Anadarko's Form 10-K for its December 31, 2014 financial statements, Shen-3's use as an injection well was more than a remote possibility.

1. *It was Evident that Prior to the Issuance of Anadarko's 2014 Annual Report Shen-3 Found No Hydrocarbons*

41. Information available during the Relevant Period demonstrates that Shen-3 found no hydrocarbons. This determination was evident prior to the issuance of Anadarko's 2014 Annual Report on February 20, 2015. For example:
- a. The poor results of the Shen-3 drilling effort appear to have been evident to Anadarko as early as November 2014. For example, in November 24, 2014 Jake Ramsey, Anadarko's Senior Staff Geologist, emailed Tim Trautman, Exploration Gulf of Mexico ("GOM") Manager, noting a proposed conceptual Shenandoah Project Timeline

²⁵ Deposition of Patrick McGrievy; 149:5-21; Exhibit 355, Minces PLLC Letter to the SEC dated May 9, 2016, APC-00113302 at 3314.

²⁶ ASC 932-360-25-18; ASC 932-360-35-18-21.

²⁷ FASB Statement of Financial Accounting Concepts No. 6, ¶25; *see also* FAS 19, ¶143.

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presented to project partners in consideration of the “[b]ad news” received from the drilling of Shen-3.²⁸

- b. Learning in December 2014 that the drilling cost for Shen-3 would be capitalized as suspended well costs, Louis Williams, Director-Expenditure Accounting,²⁹ appropriately inquired of Catherine Green, Accounting Manager-Property Accounting and Asset Retirement Obligations, as to the basis for suspending the cost. Specifically, Mr. Williams asked whether Shen-3’s continued capitalization was “because they found reserves?”³⁰ Mr. Williams would subsequently learn and document that Shen-3 “failed to find hydrocarbons within the well-bore.”³¹
- c. Having plugged the Shen-3 well in January 2015,³² Ms. Green drafted a memo asserting that the well was successful because it helped “to determine the extent of the reservoir.” However, critical, and contrary to the required capitalization conditions

²⁸ Email from Jake Ramsey dated November 24, 2014, APC-00147963. Paul Chandler, Anadarko’s Project Geological Advisor (Operations Eastern Gulf of Mexico), would acknowledge during testimony that if Shen-3 was determined to be all wet in the upper and lower Wilcox, it would be the “worst-case scenario.” *See* Deposition of Paul Chandler, 275:3-276:13; Exhibit 222, Phased Development with an Early Production Test Minimum Size Analysis dated October 2, 2014.

²⁹ APC Organizational Chart, APC-00003195 at 3200.

³⁰ Email from Louis Williams dated December 4, 2014, APC-00001801.

³¹ Email from Louis Williams dated January 5, 2015 with attached memo dated December 29, 2014, APC-00001803, APC-00001804 at 1804. While Mr. Williams further purported that Shen-3 “provided data which allowed additional reserves to be identified,” evidence available does not demonstrate that “additional reserves” were identified as part of the Shen-3 drilling. In fact, evidence reflects that as a result of Shen-3, significantly less MMBOE (Millions of Barrels of Oil Equivalent) were estimated to exist within the Shenandoah Project area. *See, e.g.*, email dated November 22, 2014 with attached Shenandoah Resource Estimate, APC-00617381, APC-00617383; Exhibit 197, Shenandoah Appraisal Program January 2015 Update & Recommendation (a PowerPoint presentation dated January 2015 showing MMBOE ranging from 780 – 1060 (P90 – P10) which was down significantly from the MMBOE estimate following Shen-2 of approximately 950 – 1450 at P90 and P10, respectively).

³² Email from Jim Kunning dated December 23, 2014, APC-00152617; Email from Pamala Johnson dated January 8, 2015, ANACOP00000354 at 354; Offshore Exposure – Dec 2014_Final_Suspended & Drilling, APC-00156333 (“rig released early Jan 2015”).

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under GAAP, Ms. Green noted that “[t]he Shendandoah-3 found sands that were non-hydrocarbon bearing and were filled with water.”³³

- d. Despite asserting that Shen-3 provided “valuable information,”³⁴ Ernie Leyendecker, Anadarko’s Senior Vice President GOM Exploration, acknowledged internally that Shen-3 was in fact, “a wet well.”³⁵
- e. In apparent recognition that Shen-3 was not “the success case,” but rather a “dry hole case” as a result of “encountering wet sands” as described in Anadarko’s April 8, 2014 Shen-3 Authorization for Expenditure (“AFE”) and communications, two of Anadarko’s Shenandoah project partners, including Conoco (its partner with a percentage interest in the project equal to Anadarko)³⁶ and Marathon, recognized the need to write off Shen-3 related drilling costs as of December 31, 2014. Specifically:³⁷
 1. Jeff Pachman, Anadarko’s Project Land Advisor, conveyed Conoco’s accounting position to various Anadarko employees that “because the [Shen-3] **well found no hydrocarbons and has no future utility, the cost will be written off as a dry hole.**”³⁸ Consistent with these communications, Conoco disclosed the following in its 2014 annual report on Form 10-K: “The results of the first Shenandoah appraisal well were announced in 2013 and confirmed Shenandoah

³³ Email from Louis Williams dated January 5, 2015, with attached memo dated December 29, 2014, APC-00001803, APC-00001804 at 1804; *see also* email from Michael Cieslak dated January 6, 2015, APC-00001863.

³⁴ Deposition of Ernest Leyendecker, 154:6-11.

³⁵ Email from Jeff Pachman dated February 12, 2015, APC-00001791 at 1791.

³⁶ In its AFE dated April 8, 2014, Anadarko, Conoco and Marathon held partnership interests in the Shenandoah Prospect of 30%, 30% and 10%, respectively while Cobalt held a 20% interest, APC-00005095.

³⁷ See Conoco’s characterization of Shen-3 as a dry hole in its emails dated January 8, 2005 at ANACOP00000354. I am aware that Anadarko’s other Shenandoah partner, Cobalt International Energy Inc. (“Cobalt”) did not expense Shen-3 well costs as of December 31, 2014. However, the evidence I have reviewed, including Cobalt’s 2014 Annual Report on Form 10-K does not contradict the determination that no hydrocarbons were found in Shen-3 and that Shen-3 was therefore deemed to be a wet well (*i.e.*, a dry hole. Cobalt 2014 Form 10-K, p. 5.

³⁸ Email from Diane Sease dated January 7, 2015, APC-00001795 at 1795 (emphasis added).

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as a significant oil discovery. **The second Shenandoah down dip appraisal well was spud in 2014 and expensed as a dry hole.**”³⁹

2. Similar communications were conveyed to Anadarko by its Shenandoah partner, Marathon. On January 28, 2015, Marathon’s Vice President, Controller and Chief Accounting Officer, Gary Wilson, emailed Cathy Douglas, Anadarko’s Chief Accounting Officer, the following note, informing Ms. Douglas of Marathon’s plan to expense Shen-3’s drilling cost:

I wanted to let you know that **based on our interpretation of ASC 932 we have decided to expense the most recent Shenandoah appraisal well.**

There will be a single line in our earnings release referencing the well in the context of our total exploration expense for the quarter.⁴⁰

Consistent with this communication, Marathon disclosed within its 2014 Annual Report on Form 10-K that “[t]he second appraisal well was spud in late May 2014 and the well costs incurred through December 31, 2014 were expensed in the fourth quarter of 2014.”⁴¹

- f. On May 9, 2016, on behalf of one of Anadarko’s Gulf of Mexico development team Senior Staff Reservoir Engineer, Lea Frye, Minces PLLC sent a letter to the SEC regarding alleged “Violations of Law by Anadarko.”⁴² In addition to expressing other concerns regarding the Company’s Shenandoah project, the letter noted that “Shen 3

³⁹ Conoco 2014 Form 10-K, p. 8 (emphasis added). *See also* email from Teri Flinner, Conoco’s GOM Principal Exploration Landman dated January 22, 2015 Re “Shenandoah-WR 52#2 (Shen-3), APC-00001791-1792 (emphasis added) (“Please be advised that ConocoPhillips Company will include the following statement in ConocoPhillip’s fourth quarter and full-year 2014 earnings report expected to follow our conference call that will be held on Jan. 29th. ‘After evaluation, **the company expensed the Shenandoah appraisal well as non-commercial.**’”).

⁴⁰ Email from Gary Wilson dated January 28, 2015, APC-00001866.

⁴¹ Marathon 2014 Form 10-K, p. 8. Note: Ms. Green further testified she never received information about these communications from ConocoPhillips or Marathon or their respective contemporaneous decision to write off Shen-3. (Deposition of Catherine Green, 85:13-86:15; 118:25-119:16).

⁴² Exhibit 355, Minces PLLC Letter to the SEC dated May 9, 2016, APC-00113302 at 3306-3329.

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was a ‘wet well’ that did not reveal the presence of hydrocarbons (oil and gas).”⁴³
Specifically, on behalf of Ms. Frye, Minces PLLC observed the following:

Following the success of the Shen 2 well, drilling of the Shenandoah 3 (“Shen 3”) well began in the second quarter of 2014. While Shen-3 was also located in Walker Ridge (Block 52), it was quickly apparent that Shen 3 did not have the promise of Shen 2. **Shen 3 was a “wet well” that did not reveal the presence of hydrocarbons (oil and gas).**¹⁰ Despite this, Anadarko executives elected to ride the wave of Shen 2 knowing the general public would accept distorted findings and projections based on the success of Shen 2. However, Shen-3 was nothing like Shen 2.

Even though Shen 3 was a wet well, the exploration team described it as successful in terms similar to those used to describe Shen 2. They did this in part by redefining the criteria by which resource capacity is projected. Aware that Shen 3 had the same sands (porous rock structure that can hold recoverable oil) that were present in Shen 2, the exploration team analogized Shen 3’s resource projections to those of Shen 2. In doing this, they ignored the findings of Ms. Frye and other engineers, even though these persons’ expertise is superior to theirs and even though the exploration team’s projections were in contravention of Anadarko’s published standards. ...⁴⁴

¹⁰ A “wet well” is often referred to in the oil and gas industry as a “dry hole.”

- g. In response to assertions in this letter and other information, outside consultants hired by the Company repeatedly affirmed that Shen-3 was indeed a “wet well or “dry hole.”⁴⁵

⁴³ Exhibit 355, Minces PLLC Letter to the SEC dated May 9, 2016, APC-00113302 at 3314.

⁴⁴ Exhibit 355, Minces PLLC Letter to the SEC dated May 9, 2016, APC-00113302 at 3314.

⁴⁵ Norton Rose Fulbright Report, APC-00002563 at 2642, 2645, 2758, and 2802.

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- h. Catherine Green, Accounting Manager-Property Accounting and Asset Retirement Obligations,⁴⁶ and Patrick McGrievy, Anadarko's former Deepwater Gulf of Mexico General Manager, both testified that Shen-3 did not contain any hydrocarbons.⁴⁷

2. ***The Successful Efforts Method of Accounting Required that Anadarko Expense the Cost of Drilling Exploratory Well and Exploratory-Type Stratigraphic Wells, Including Shen-3, When No Hydrocarbons Were Found***

- a) The "Successful Efforts" Method of Accounting Permitted the Capitalization of Certain Anadarko Exploration Costs But Was Intended to Highlight Failures During the Search for Oil By Expensing Costs That Do Not Result in an Identifiable Future Benefit

42. GAAP required that Anadarko account for oil and gas exploration and development costs using one of the following distinct accounting methodologies: (i) the full cost method, or (ii) the successful efforts method.⁴⁸ During the Relevant Period, Anadarko's policy was to apply the successful efforts method of accounting.⁴⁹

⁴⁶ Ms. Green testified that the "predominant basis" Shen-3 costs were suspended and capitalized was because of her belief that "the information from Shen 3 increased the overall resource estimate" of Shenandoah. However, Ms. Green further acknowledged that upon review, Shenandoah-3 did not increase the overall resource estimate of the Shenandoah project. (Deposition of Catherine Green 92:24-94:19). This is consistent with Condition 2 (*i.e.*, that Shen-3 materially reduced the likely reserves within the Shenandoah field) and the information available during Anadarko's Q4 2014 financial reporting period cited below beginning at paragraph 83 reflecting that as a result of Shen-3, Anadarko's estimated oil reserves in the Shenandoah area actually decreased.

⁴⁷ Deposition of Catherine Green, 70:24-71:71:8 ("Q. So Shenandoah did not contain hydrocarbons; correct – I'm sorry – A. Correct. Q. – Shenandoah 3 did not contain hydrocarbons; correct? A. Correct. Q. So, in other words, no oil was discovered by Shenandoah 3; correct? A. There were – there was no oil in the wellbore of Shenandoah 3."); Deposition of Patrick McGrievy; 149:5-21 ("Q. And once Shen 3 Tded, which completed, it was found that it was – it was all wet; right? A. There was no hydrocarbons on the log – on the log, right. ... THE WITNESS: There was no hydrocarbons on the log to speak of. Q. Otherwise, it could be called a wet well? A. Yeah, it could be. Yeah, you could term it a wet well. Q. And the well results from Shen 3 which found no hydrocarbons resulted in a significant downward revision to the resource size of Shenandoah 3? A. Yep. Yes, it would.").

⁴⁸ ASC 932-10-S99. Note: The FASB has expressed its "preference for" the successful efforts method of accounting. SFAS No. 25, *Suspension of Certain Accounting Requirements for Oil and Gas Producing Companies – An Amendment of FASB Statement No. 19*.

⁴⁹ See, *e.g.*, AB 20-5, *Well Classification and Disposition of Suspended Well Costs*, APC-00001829; Anadarko 2014 Form 10-K, p. 95; Anadarko 2017 Form 10-K, p. 97.

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43. Under the full cost method, companies are generally able to capitalize all costs incurred in exploring for, acquiring, and developing oil reserves.⁵⁰ For example, capitalization of the cost of drilling exploration wells and exploratory-type stratigraphic wells is permitted irrespective of whether a well is successful under the full cost method of accounting.⁵¹
44. In its original 1977 Basis for Conclusion upon issuance of relevant GAAP (*i.e.*, FAS 19), the FASB observed that “[e]stablishing a direct cause-and-effect relationship **between costs incurred and specific reserves discovered is not relevant to full costing**.”⁵² The FASB further observed that because the full cost method permits the capitalization of costs relating to unsuccessful property acquisitions and unsuccessful exploratory activities along with the costs of successful acquisitions and exploratory activities, “**full costing tends to obscure failure and risk**.”⁵³
45. Conversely, “only those exploration costs⁵⁴ and development costs⁵⁵ that relate directly to specific oil and gas reserves are capitalized under the successful effort method.”⁵⁶ Costs that do not relate directly to specific reserves are expensed.⁵⁷
46. In establishing this GAAP, the FASB recognized that a direct relationship exists between (i) costs incurred, and (ii) the discovery of oil reserves, under the successful efforts

⁵⁰ ASC 932-10-S99; ASC 932-360-S99.

⁵¹ ASC 932-10-S99; ASC 932-360-S99; AICPA Audit and Accounting Guide, *Entities with Oil and Gas Producing Activities – Clarified*.

⁵² FAS 19, ¶102 (emphasis added).

⁵³ FAS 19, ¶151 (emphasis added).

⁵⁴ Exploration costs are defined in part under GAAP as “[c]osts incurred in identifying areas that may warrant examination and in examining specific areas that are considered to have prospects of containing oil and gas reserves, including costs of drilling exploratory wells and exploratory-type stratigraphic test wells exploration costs may be incurred both before acquiring the related property (sometimes referred to in part as prospecting costs) and after acquiring the property. ASC 932-10-S99.

⁵⁵ Development costs are defined in part under GAAP as “costs incurred to obtain access to proved reserves and to provide facilities for extracting, treating, gathering and storing the oil and gas.” ASC 932-10-S99.

⁵⁶ ASC 932-360-25-3.

⁵⁷ ASC 932-360-25-3.

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methodology.⁵⁸ Indeed, the FASB further noted that because the **“discovery of oil and gas reserves is a critical event in determining failure or success,”** the successful effort accounting methodology is intended to highlight “failures and the risks involved in the search for oil and gas reserves **by charging to expense costs that are known not to have resulted in identifiable future benefits.**”⁵⁹

47. Although the successful efforts methodology permits the initial capitalization of certain exploration costs, including the cost of drilling exploration wells and exploratory-type stratigraphic wells,⁶⁰ the ongoing capitalization of those costs ultimately depends on whether “proved reserves”⁶¹ are found by the well. Of particular relevance, ASC 932-360-35-18 describes a scenario under the successful efforts accounting method where **“an exploratory-type stratigraphic well may be determined to have found oil and gas reserves, but those reserves cannot be classified as proved when drilling is completed.”**⁶² **In such circumstances**, GAAP states that the costs of drilling the well shall only continue to be capitalized if:

⁵⁸ FAS 19, ¶102.

⁵⁹ FAS 19, ¶151 (emphasis added).

⁶⁰ ASC 932-360-25-10 (emphasis added) (“The costs of drilling exploratory wells and the costs of drilling exploratory-type stratigraphic test wells shall be capitalized as part of the entity’s uncompleted wells, equipment, and facilities **pending determination of whether the well has found proved reserves.**”).

⁶¹ **“Proved Oil and Gas Reserves”** are defined in part as, “those quantities of oil and gas, which, by analysis of geoscience and engineering data, **can be estimated with reasonable certainty to be economically producible from a given date forward**, from known reservoirs, and under existing economic conditions, operating methods, and government regulation before the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether the estimate is a deterministic estimate or probabilistic estimate. ... In the absence of data on fluid contacts, proved quantities in a reservoir are limited by the lowest known hydrocarbons as seen in a well penetration unless geoscience, engineering, or performance data and reliable technology: establish a lower contact with reasonable certainty.” ASC Master Glossary (emphasis added).

⁶² ASC 932-360-35-18 (emphasis added) (**“An exploratory well or an exploratory-type stratigraphic well may be determined to have found oil and gas reserves, but those reserves cannot be classified as proved when drilling is completed.** In those cases, the capitalized drilling costs shall continue to be capitalized **if the well has found a sufficient quantity of reserves to justify its completion as a producing well** and the entity is making sufficient progress assessing the reserves and the economic and operating viability of the project. Note that an entity is not required to complete the exploratory or exploratory-type stratigraphic well as a producing well.”).

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- a. “the well has found a sufficient quantity of reserves to justify its completion as a producing well”; and
- b. “the entity is making sufficient progress assessing the reserves and the economic and operating viability of the project.”⁶³

48. Therefore, an exploratory-type stratigraphic well that is determined **not** to have found **any** oil and gas reserves (*i.e.*, a “dry hole” or “wet well”)⁶⁴ **is required to be expensed under GAAP.**⁶⁵ That is, absent the identification of any oil reserves, the proved reserves threshold could never be satisfied, and the cost of exploratory drilling must be expensed. In this regard, the FASB has observed that “costs be charged to expense as soon as a determination is made that proved reserves have not been found.”⁶⁶ Consistent with this

⁶³ ASC 932-360-35-18.

⁶⁴ See, e.g., Norman Rose Fullbright Report, APC-00002563 at 2645, 2802; Exhibit 355, Minces PLLC Letter to the SEC dated May 9, 2016, APC-00113302 at 3314.

⁶⁵ See also AICPA Audit and Accounting Guide, *Entities with Oil and Gas Producing Activities – Clarified*, 4.12-4.16 and 9.42 (emphasis added) (“**If an exploratory well or exploratory-type stratigraphic test well is in progress at the end of a period and the well is determined not to have found reserves before the financial statements for that period are issued, the costs incurred through the end of the period, net of any salvage value, are charged to expense for that period,** in accordance with FASB ASC 932-360-40-10 [...] 9.42 Under successful efforts accounting, costs incurred in drilling exploratory wells that are determined to be dry holes should be expensed.”); 2.78 (“If the well is deemed to not contain adequate reserves to more than cover the costs to complete the well and the future production costs, it will likely be declared a “dry hole” and will be abandoned.”).

See also Deloitte Oil and Gas, *Accounting, Financial Reporting, and Tax Update*, January 2016, p. 2 (“Under the successful-efforts method, costs related to the successful identification of new reserves may be capitalized while costs related to unsuccessful exploration efforts (e.g., drilling efforts that result in a dry hole) would be immediately recorded on the income statement.”).

⁶⁶ FAS 19, ¶198; See also AB 20-5, *Well Classification and Disposition of Suspended Well Costs*, APC-00001829 at 1829 (emphasis added) (“The initially capitalized costs of drilling exploratory wells that do not find proved reserves are expensed (net of any salvage value, as defined in the Accounting Bulletin 20.7) **when determination is made that no proved reserves can be attributed as a result of such drilling.**”); FASB Staff Position, FAS 19-1: *Accounting for Suspended Well Costs* (emphasis added) (“In certain circumstances, **an exploratory well finds reserves** but those reserves cannot be classified as proved when drilling is completed. ... Paragraphs 31–34 of Statement 19 provide guidance on whether exploratory well costs can continue to be capitalized **when the well finds reserves but those reserves cannot be classified** as proved when drilling is completed. If reserves cannot be classified as proved in an area requiring a major capital expenditure, paragraphs 31(a) and 34 of Statement 19 require that the cost be carried as an asset provided that (a) there have been sufficient reserves found to justify completion as a

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understanding, Anadarko asserted in its 2014 Annual Report on Form 10-K that under the successful efforts method, exploratory costs “associated with **a well discovering hydrocarbons** are initially capitalized, or suspended, pending a determination as to whether a commercially sufficient quantity of proved reserves can be attributed to the area as a result of drilling.”⁶⁷

b) Anadarko’s Contemporaneous Authorization for Expenditure Reflects that Shen-3 Was Drilled for Exploratory Purposes

49. Evidence reflects that the Shen-3 well was drilled for exploratory purposes. For example, in Anadarko’s April 8, 2014 AFE, provided to various Shenandoah project partners, stated that the Shen-3 drilling “Type” was “EXPLORATORY.”⁶⁸ In other examples, (i) the Company’s December 2014 draft suspended well accounting analysis explicitly described Shen-3 as meeting the definition of an “exploratory stratigraphic test well,”⁶⁹ and (ii) KPMG’s recurring suspended well cost memoranda during the Relevant Period through Q2 2016, described capitalized Shen-3 well costs as being “exploratory assets.”⁷⁰
50. The classification of Shen-3 as exploratory in nature has important significance under GAAP. Exploration costs, including the cost of drilling exploration wells and exploratory-type stratigraphic wells, must comply with the successful effort method accounting guidance set forth above. Indeed, consistent with the successful effort accounting concepts

producing well if the required capital expenditure is made, and (b) drilling of the additional exploratory wells is under way or firmly planned for the near future. If either of those two criteria is not met, **the enterprise must expense the exploratory well costs.**”).

⁶⁷ Anadarko 2014 Form 10-K, p. 79.

⁶⁸ Letter to Shenandoah Partners AFE No. 2087315 WR 52 No. 2 dated April 8, 2014, APC-00005093 at 5095.

⁶⁹ Email from Michael Cieslak dated January 6, 2015, APC-00001863 at 1864.

⁷⁰ GG.4.A.8.05 Suspended Well Costs Memo Period-end 12-31-2014, KPMG_APC_eA_0002511; Q1GG.15 Suspended Well Costs Memo Period-end 3-31-2015, KPMG_APC_eA_0003262; Q2.GG.13 Suspended Well Costs Memo Period-end 6-30-2015, KPMG_APC_eA_0003349; Q3.GG.13 Suspended Well Costs Memo Period-end 9-30-15, KPMG_APC_eA_0003451; GG.4.A.8.10 Suspended Well Costs Memo Period-end 12-31-2015, KPMG_APC_eA_0006079; GG.4.A.8.10 Suspended Well Costs Memo Period-end 3-31-2016, KPMG_APC_eA_0007100.

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described above, Anadarko noted in its April 8, 2014 Letter to its Shenandoah partners that the Shen-3 “success case” equated to encountering oil:

Please note that **the “dry hole case” equates to encountering wet sands and the “success case” equates to encountering oil** via LWD, mud logs or other tools used while drilling through the objective section.⁷¹

c) Exploratory Well and Exploratory-Type Stratigraphic Well Costs Are Required To Be Assessed On Their Own Under GAAP

51. Importantly, accounting for an exploration well (and an exploratory-type stratigraphic well) must be evaluated on its own under GAAP. That is, the success of a specific well in finding oil reserves should not be based on whether another, separate and distinct well previously found oil within a larger project area. In this regard, the FASB observed:

An exploratory well must be assessed on its own, and the direct discovery of oil and gas reserves can be the sole determinant of whether future benefits exist and, therefore, whether an asset should be recognized.⁷²

52. Consistent with this understanding, the guidance established under ASC 932-360-35-18 is specifically worded in the context of evaluating the continued capitalization of “the well” or “an exploratory well.” Thus, as noted below, the continued asset capitalization of “an exploratory well or an exploratory-type stratigraphic well,” subject to finding oil, is not written in the context of finding oil in an overall project area (e.g., the Shenandoah project, including the Shenandoah 1 and 2 wellbores), rather it is specific:

An exploratory well or an exploratory-type stratigraphic well may be determined to have found oil and gas reserves, but those reserves cannot be classified as proved when drilling is completed. In those cases, the capitalized drilling costs shall continue to be capitalized if **the well** has

⁷¹ Letter to Shenandoah Partners AFE No. 2087315 WR 52 No. 2 dated April 8, 2014, APC-00005093 at 5094.

⁷² FAS 19, ¶31 (emphasis added).

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found a sufficient quantity of reserves to justify its completion as a producing well ...⁷³

53. Although a separate criterion exists in ASC 932-360-35-18 requiring an entity to assess the economic and operating viability of the project overall, that criterion becomes irrelevant if an individual well fails to find oil reserves. To incorrectly assume the requirement was specific to the project overall and not the individual well, Anadarko would have satisfied the requirement prior to spudding Shen-3 based on the prior period Shen-1 and Shen-2 results. This flawed assumption is directly inconsistent with the successful effort methodology which, as noted above, was intended to highlight failures during the search for oil by expensing costs that do not result in an identifiable future benefit. Suspending (capitalizing) such costs would obscure failure and risk (violating GAAP) by converting Anadarko's accounting policy for this well to its having adopted the full cost method of accounting, contrary to its stated use of the successful efforts method of accounting, (*see* paragraphs 42-44 above).
54. In addition to its disclosed policy cited above in paragraph 48, Anadarko's applied accounting practices during the Relevant Period reflect an understanding that exploration wells and exploratory-type stratigraphic wells, similar to Shen-3, were required to be evaluated individually in assessing whether capitalization of suspended well costs under GAAP was appropriate. Indeed, Anadarko's internal accounting policy A.B. No 20.5, *Well Classification and Disposition of Suspended Well Costs*, included illustrative examples requiring that exploratory wells be assessed individually, and expensed when a related well is dry (*i.e.*, Examples 1 and 4 of Exhibit I).⁷⁴

⁷³ ASC 932-360-35-18 (emphasis added). *See also, e.g.*, Overview of Oil and Gas Accounting & PSC Accounting, Budi Hartono, Ernst & Young LLP, p. 12 ("Under US GAAP, an appraisal well is treated exactly the same as an exploration well and should be written-off if unsuccessful, even the very same field or reservoir is determined to be successful and developed."); FAS 19 ¶201 ("The costs of drilling the exploratory-type stratigraphic test well are capitalized pending determination of whether proved reserves are found, subject to the condition that those costs not continue to be carried as assets indefinitely if stratigraphic test drilling activity in the area has ceased or if the quantity of reserves found would not justify completion of the well for production had it not been simply a stratigraphic test well.").

⁷⁴ A.B. No 20.5, *Well Classification and Disposition of Suspended Well Costs*, APC-00001829 at 1838-1841.

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55. Consistent with this understanding, Anadarko repeatedly wrote off drilling costs for individual wells, despite the respective wells being located within a larger project area where oil reserves had previously been discovered. For example:
- a. In connection with its Coronado oil exploration project, Anadarko undertook multiple drilling efforts that resulted in capitalized suspended costs through June 30, 2014. During Q2 2014, the Company determined that one of its related wells was a “dry hole” where no reserves were identified. Although the well was located within the Coronado play, the Company recognized the need to, and in fact did, expense those costs associated with the unsuccessful well. At the same time, Anadarko continued to capitalize other suspended exploration well costs incurred in connection with successful efforts within the Coronado area.⁷⁵
 - b. During the same reporting period, similar dry hole accounting expenses were recorded in connection with an unsuccessful “dry hole” well located in Anadarko’s Yucatan project area. While the individual dry hole well costs were expensed, the Company continued to capitalize other suspended well costs (*i.e.*, not determined to be dry holes) associated with previous successful exploration wells located in the same project area.⁷⁶
 - c. During Q3 2016, Anadarko expensed certain specific unsuccessful well efforts during Q3 2016 within its Tubarao Tigre and Mozambique exploration project areas. While the individual dry hole well costs were expensed, the Company continued to capitalize other exploratory well costs (*i.e.*, not determined to be dry holes) in these respective exploration project areas.⁷⁷
56. In fact, Anadarko’s, albeit non-timely, write-off of Shen-3 during Q3 2016 despite the Company’s continued capitalization of other wellbores (*e.g.*, Shen-1, Shen-2, Shen-4 and

⁷⁵ Q2 2014 Exploration Expense Testwork Memo – Dry Hole Expense, KPMG_APC_eA_0003043 at 3046-3047.

⁷⁶ Q2 2014 Exploration Expense Testwork Memo – Dry Hole Expense, KPMG_APC_eA_0003043 at 3047-3048.

⁷⁷ Q3 2016 Exploration Expense Testwork Memo – Dry Hole Expense, KPMG_APC_eA_0007469 at 7472-7474.

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Shen-5) demonstrates that wells are to be assessed individually under the successful efforts method and ASC 932-360.⁷⁸ This accounting treatment is further consistent with the testimony of Catherine Green, Accounting Manager-Property Accounting and Asset Retirement Obligations,⁷⁹ who affirmed that the determination of whether you should suspend the well cost “is done on a well-by-well basis.”⁸⁰

d) GAAP Required Anadarko to Immediately Expense Exploratory Wells and Exploratory-Type Stratigraphic Wells When It Was Determined That No Hydrocarbons Were Found as of December 31, 2014

57. Information reflects that Anadarko capitalized approximately \$64 million of suspended costs of drilling Shen-3 as of December 31, 2014.⁸¹ Given the supporting information demonstrating that Shen-3 found no oil, these suspended costs were required to be expensed under the aforementioned GAAP. As this information appears evident, no later than the filing date of Anadarko’s 2014 annual financial statements on Form 10-K, the Shen-3 related write-off expense and disclosure of this \$64 million dry hole expense was required no later than December 31, 2014. In this regard, the expensing of Shen-3 was necessary and consistent with GAAP requirements under the successful effort method to highlight failures and risks involved in exploration of the Company’s Shenandoah project.
58. Indeed, in addition to acknowledging that the Shen-3 was a “wet well” or “dry hole,” as described above, Anadarko conceded in a November 10, 2016 memo that the well “was unsuccessful under ASC 932-360-25-18.”⁸² Stated differently, Anadarko inherently

⁷⁸ Q3 2016 Exploration Expense Testwork Memo – Dry Hole Expense, KPMG_APC_eA_0007469 at 7470-7471.

⁷⁹ APC Organizational Chart, APC-0003195 at 3202.

⁸⁰ Deposition of Catherine Green, 83:7-14 (“Going back to my initial question, though, this analysis is done on a well-by-well basis; correct? A. Yes, whether you should ca- -- whether you should capitalize -- continue to suspend the well cost is done on a well-by-well basis, subject to also the sufficient progress criteria for the overall project.”).

⁸¹ Offshore Exposure - Dec 2014_Final_Suspended & Drilling, APC-00156333.

⁸² Q3 2016 – Shenandoah-3 Suspended Well Accounting Analysis dated November 10, 2016, APC-01720564 at 0566.

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acknowledged that it lacked a reasonable and appropriate basis under ASC 932-360-25 to capitalize the Shen-3 exploratory-type stratigraphic well costs during 2014.

3. ***The Unlikely Use of Shen-3 As An Injection Well Further Supports Anadarko's Requirement Under GAAP to Expense Shen-3 Drilling Costs When No Hydrocarbons Were Found***

59. As discussed above, the FASB recognized the general concept that costs that do not relate to probable future economic benefit are normally not capitalized during the Relevant Period. Beyond the principal failure of Anadarko to find hydrocarbons at Shen-3, the well's unlikely use as an injection well (Condition 1) further demonstrates the remote likelihood that Shen-3 would provide the Company with future economic benefits. The evidence that I have seen produced by the Company only cites to speculation that the Shen-3 well bore may be used as a water injection well or other service well and not to any evidence reflecting a study or analyses resulting in a contemptuous conclusion that such use was likely.⁸³

B. ANADARKO'S Q3 2016 ASSERTION THAT CONTINUED CAPITALIZATION OF SHEN-3 WAS ACCEPTABLE BECAUSE A "REASONABLE POSSIBILITY" EXISTED THAT THE WELL WOULD BE USED AS AN INJECTION WELL OR SIDETRACK WELL IS FLAWED AND UNSUPPORTED IN GAAP

60. As noted above in paragraph 58, Anadarko internally acknowledged that Shen-3 was "unsuccessful" and therefore, did not satisfy the specific capitalization requirements established in ASC 932-360-25-18 for exploratory-type stratigraphic well costs. However, the Company further asserted that because a "reasonable possibility" existed that the well would be used as an injection well, sidetrack well, or development well, capitalization of Shen-3 in 2014 through Q3 2016 was appropriate.⁸⁴ This assertion, even if true, has no basis under GAAP and is fundamentally flawed.

1. ***The Company Acknowledged That Shen-3 Well Costs Were Not Exploration Costs that Could Be Capitalized under ASC 932-360-25-18***

⁸³ Deposition of Ernest Leyendecker, 91:8–95:12, 176:15–182:3, and 196:02–202:4.

⁸⁴ Q3 2016 – Shenandoah-3 Suspended Well Accounting Analysis dated November 10, 2016, APC-01720564 at 0566.

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61. Given that Shen-3 found no hydrocarbons (*i.e.*, Section V.A.1), the Shen-3 exploratory-stratigraphic well drilling costs were not capitalizable under applicable GAAP as of December 31, 2014. Indeed, the Company affirmed during Q3 2016 that:
- a. The “Shenandoah-3 well was drilled as an exploratory stratigraphic test well”; and
 - b. The Shen-3 well was “unsuccessful” under ASC 932-360-25-18.⁸⁵
62. As a result, the Company correctly concluded in 2016 that its Shen-3 well costs could **not** be capitalized pursuant to the specifically provided GAAP to which an exploratory-type stratigraphic well relates (*e.g.*, ASC 932-360-25-18; ASC 932-360-35-18). This is significant because under GAAP, companies, including Anadarko, are required to first consider Codification guidance that is specific to a particular transaction or event (*e.g.*, the costs incurred when drilling an exploratory-type stratigraphic well) when determining how to account for the transactions or events.⁸⁶ Only in the absence of specific guidance, may companies refer to accounting principles for “similar” transactions or events within a source of authoritative GAAP.⁸⁷ Absent specific guidance within the relevant codification, a company should look to nonauthoritative accounting guidance outside the Codification.⁸⁸ However, because specific Codification guidance did exist for exploratory-type stratigraphic wells (ASC 932-360-25-18; ASC 932-360-35-18), Anadarko was required to apply it.
2. ***The Company Acknowledged That Shen-3 Well Costs Were Not Development Costs that Could Be Capitalized under ASC 932-360-25-14***
63. Referencing Shen-3’s purpose as “an exploratory stratigraphic test well,” Anadarko further acknowledged during Q3 2016 that Shen-3 related drilling costs were not “development

⁸⁵ Q3 2016 – Shenandoah-3 Suspended Well Accounting Analysis dated November 10, 2016, APC-01720564 at 0566.

⁸⁶ ASC 105-10-05-02.

⁸⁷ ASC 105-10-05-02.

⁸⁸ ASC 105-10-05-03.

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costs,” as contemplated by ASC 932-360-25-14.⁸⁹ I agree with this conclusion.⁹⁰ Because ASC 932-360-25-14 provides the primary accounting guidance for the initial recognition (and capitalization) of **development** costs, the Shen-3 exploratory-stratigraphic well drilling costs were **not** capitalizable thereunder.⁹¹

64. This is also important considering that GAAP includes the costs of drilling injection, development wells and other service wells within its definition of “development costs.”⁹² Therefore, a reasonable possibility that Shen-3 might be used as an injection well, even if objectively supportable, is not relevant to whether Anadarko could capitalize its related drilling costs based on the Company’s implicit acknowledgement that capitalization for

⁸⁹ Q3 2016 – Shenandoah-3 Suspended Well Accounting Analysis dated November 10, 2016, APC-01720564 at 0566; *see also* Deposition of Catherine Green, 47:4-17 (“Q. Was Shenandoah 3 an exploratory well? A. Yes. Q. Accordingly, Shenandoah 3 was not a development well; correct? A. Correct. Q. And this determination was made prior to Shenandoah 3 being spud; correct? A. Yes. Q. So Shenandoah 3 costs were associated with exploration costs; correct? A. Yes. Q. And Shenandoah 3 costs were not associated with development costs; correct? A. Correct.”).

⁹⁰ ASC 932-360; *see also* AICPA Audit and Accounting Guide, *Entities with Oil and Gas Producing Activities – Clarified*, 4.17-4.18 (“4.17 Costs incurred to obtain access to proved reserves and to provide facilities for extracting, treating, gathering, and storing the oil and gas are capitalized. All costs incurred to drill and equip development wells, development-type stratigraphic test wells, and service wells are development costs and are capitalized, whether the well is successful or dry. ... Because development dry holes are capitalized and exploratory dry holes are expensed, **the distinction between them is extremely important and should be made by the company prior to drilling.**”); FAS 19, ¶¶203-205 (“[T]here is an important difference between exploratory dry holes and development dry holes. The purpose of an exploratory well is to search for oil and gas. The existence of future benefits is not known until the well is drilled. Future benefits depend on whether reserves are found.”).

⁹¹ ASC 932-360-25-14 (“Development costs shall be capitalized as part of the cost of an entity’s wells and related equipment and facilities. Thus, all costs incurred to drill and equip development wells, development-type stratigraphic test wells, and service wells are development costs and shall be capitalized, whether the well is successful or unsuccessful. Costs of drilling those wells and costs of constructing equipment and facilities shall be included in the entity’s uncompleted wells, equipment, and facilities until drilling or construction is completed.”).

⁹² ASC 932-360-25-12 and 13 (emphasis added) (“Development costs are incurred to obtain access to proved reserves and to provide facilities for extracting, treating, gathering, and storing the oil and gas. More specifically, development costs, including depreciation and applicable operating costs of support equipment and facilities (see paragraph 932-360-25-16) and other costs of development activities, are costs incurred to . . . [d]rill and equip **development wells**, development-type stratigraphic test wells, and **service wells**”); *see also* ASC Master Glossary (emphasis added) (“A **service well** is a well drilled or completed for the purpose of supporting production in an existing field. Wells in this class are drilled for the following specific purposes: **gas injection (natural gas, propane, butane, or flue gas), water injection, steam injection, air injection**, salt-water disposal, water supply for injection, observation, or injection for in-situ combustion.”).

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Shen-3 as development cost under ASC 932-360-25-14 was inappropriate, because it was an exploratory well.

3. *The Company's Q3 2016 Accounting Position To Justify the Suspension of Shen-3 Costs Until Q3 2016 Is Unsupported*

65. Instead of applying directly relevant GAAP as required as of Q4 2014, and without referencing alternative supporting accounting standards in the Codification, the Company continued to suspend Shen-3 well costs until Q3 2016. Although Shen-3 well costs were written off as a dry hole as of September 30, 2016, to justify its capitalization of Shen-3 well costs through Q2 2016, Anadarko documented that the Shen-3 well costs were, more generally, “exploration costs” that could be capitalized under the successful efforts method.⁹³ More specifically, the Company noted that given Shen-3’s possible future use as an injection well in the unproved Shenandoah project, related costs could (1) be considered exploration costs, and (2) those costs could provide future benefit to Anadarko during Shenandoah’s development phase.⁹⁴
66. Beyond the overarching failings described above, including conflicting, relevant GAAP precluding the capitalization of Shen-3, Anadarko’s subsequently documented accounting argument (in Q3 2016) is flawed because of the following additional issues:
- a. No specific basis existed in GAAP to support Anadarko’s flawed accounting conclusion that Shen-3 costs could be suspended if a reasonable possibility existed that the well could be used as an injection well at the unproved Shenandoah project area;

⁹³ Q3 2016 – Shenandoah-3 Suspended Well Accounting Analysis dated November 10, 2016, APC-01720564 at 0566.

⁹⁴ See, e.g., Q3 2016 – Shenandoah-3 Suspended Well Accounting Analysis dated November 10, 2016, APC-01720564 at 0565; Demand Letter Investigation updated January 20, 2017, KPMG_APC_eA_0009644.

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- b. The “reasonable possibility” threshold inherent in the Company’s assumption, even if true, fails to satisfy the FASB’s conceptual framework definition of an asset (*i.e.*, a “probable” future economic benefit).⁹⁵
- c. Anadarko subsequently asserted that the Company’s Chief Accounting Officer, Cathy Douglas, “relied upon the injection well capability of Shenandoah-3 as the predominant reason for suspending the well costs at year-end 2014.”⁹⁶ However, I have not seen contemporaneous objective evidence demonstrating that a “reasonable possibility”⁹⁷ existed that Shen-3 could be used as an injection well or a development well as of December 31, 2014. Instead, I have only seen references which amount to speculation or general lack of confidence that Shen-3 could be used as an injection well or development well. For example:
 1. A sentence included in the Company’s Q4 2014 draft suspended well cost memo pertaining to Shen-3, noting only the following sentence reflecting that management was evaluating whether Shen-3 **might** have future utility as an injection well, **assuming** Shenandoah moved to the development phase:

Management **is also evaluating** future utility of this well-bore as an injection well for the field, or as a development well to sidetrack into oil-bearing sands.⁹⁸

⁹⁵ FASB Statement of Financial Accounting Concepts No. 6, ¶25. (“Assets are probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events.”); *see also* FAS 19, ¶143. (“In the presently accepted financial accounting framework, an asset is an economic resource that is expected to provide future benefits and nonmonetary assets generally are accounted for at the cost to acquire or construct them. Costs that do not relate directly to specific assets having identifiable future benefits normally are not capitalized—no matter how vital those costs may be to the ongoing operations of the enterprise. If costs do not give rise to an asset with identifiable future benefits, they are charged to expense or recognized as a loss.”).

⁹⁶ Q3 2016 – Shenandoah-3 Suspended Well Accounting Analysis dated November 10, 2016, APC-01720564 at 0565.

⁹⁷ Under GAAP, “reasonably possible” is defined as “more than a remote but less than likely.” ASC Master Glossary.

⁹⁸ Email from Michael Cieslak dated January 6, 2015, APC-00001863 at 1864. *see also* email from Time Trautman dated December 29, 2014, ANACOP00025913.

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2. As noted above, on January 7, 2015, Jeff Pachman, Anadarko's Project Land Advisor, further conveyed Conoco's accounting position to various Company employees that "because the [Shen-3] **well found no hydrocarbons and has no future utility, the cost will be written off as a dry hole.**"⁹⁹
3. Consistent with this understanding, on January 8, 2015, Anadarko's partner, Conoco's Deepwater Asset Development team, in connection with its determination to dry hole expense Shen-3, internally notified employees that Shen-3 was "fully water-wet," and was not likely to be considered as a future sidetrack well:

Data from both the original and bypass well bores confirmed that the well did encounter reservoir quality sand but **was fully water-wet**. The WR52-2 was P&A'd under a Temporary Abandonment classification but meets the criteria for Permanent Abandonment. The Temporary classification was used to allow the flexibility to re-enter the well for an up-dip sidetrack. There is no current plan to re-enter the WR52-2 and it is believed that if the operator is successful in the next appraisal well a sidetrack of WR52-2 would **not be considered in the near future or likely at all.**¹⁰⁰

4. In a January 23, 2015 email to Marathon's Controller and CAO, Gary Wilson, Ms. Douglas communicated that Anadarko "**will be assessing** the future utility of the wellbore" as a "possible sidetrack, injector, etc."¹⁰¹ This again indicates that no substantive analysis as to Shen-3's possible use as an injection or development well had occurred at Anadarko. Indeed, as discussed above, Marathon recognized Shen-3 to be a dry hole for accounting purposes in Q4 2014.
5. In a February 12, 2015 email, Mr. Leyendecker stated, without reference to underlying support, that Shen-3 was "**potentially useable** as a future water

⁹⁹ Email from Diane Sease dated January 7, 2015, APC-00001795-1796 at 1795 (emphasis added).

¹⁰⁰ Email from Pamala Johnson dated January 8, 2015, ANACOP00000354-0355 at 354 (emphasis added).

¹⁰¹ Email from Cathy Douglas dated January 23, 2015, APC-00001867-1868 at 1867 (emphasis added).

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injection well for pressure maintenance.”¹⁰² However, while acknowledging internal Anadarko communications on or before February 2, 2015 that ““Shen-3 cannot be utilized as a water injector given its current design,”” Mr. Leyendecker further testified that he did not recall seeing any “in-depth drilling engineering analysis that said [Shen-3] could be used as an injector well.”¹⁰³ Moreover, after reading from internal communications from Mr. Trautman noting that “re-entry” of Shen-3 ““would be risky (mechanically),”” Mr. Leyendecker further testified to his understanding in February 2015 that Shen-3 could not be sidetracked.¹⁰⁴

67. While an internal analysis and memo does appear to have been performed and prepared by Anadarko regarding the use of Shen-3 as an injection or development well, it does not appear to have occurred until Q3 2016. Therein, the Company concluded that Shen-3 had a “low probability of becoming a water injection well conversion.” Specifically, during 2016, Mr. Williams wrote about the Company’s efforts to understand the utility of Shenandoah 3 as a future water injection well and its conclusion, stating in part:

[T]he most recent concept selection work suggests that the Shenandoah #3 wellbore (WR 52-2) is not in an optimal location as a water injector and for waterflood oil recovery. This is despite the fact that an east-west trending fault, potentially isolating the Shen 3 well from a large updip waterflood area, was identified in Q3, 2014 [sic] not invoked in the model. Currently, the Shenandoah G&G team has seismic evidence (although not with certainty and approximated to be 50% probable) that an east-west trending fault does exist north of the Shenandoah 3 wellbore which may inhibit the waterflood front from influencing and increasing oil recovery in up-dip producing wells. As a result, the Shenandoah 3 is currently not being considered a candidate for water injection well conversion if the project moves forward to the sanctioning (FID) phase.

* * *

In summary, with the latest results of the ongoing subsurface waterflood studies and the mechanical challenges of converting this well to

¹⁰² Email from Jeff Pachman dated February 12, 2015, APC-00001791-1792 at 1791 (emphasis added); *see also* Deposition of Patrick McGrievy, 173:22-175:5.

¹⁰³ Deposition of Ernest Leyendecker, 196:02-202:4; Email from Chip Oudin dated February 2, 2015, APC-00001928.

¹⁰⁴ Deposition of Ernest Leyendecker, 91:8-95:12; Email from Tim Trautman dated January 29, 2015, APC-00158152.

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a viable waterflood injection well, the wellbore is considered to have a low probability of becoming a water injection well conversion.¹⁰⁵

68. In connection with this analysis, Anadarko wrote-off Shen-3 as a dry hole during Q3 2016 asserting that a reasonable possibility no longer existed that Shen-3 could be used as an injection well. However, this write-off was untimely. Anadarko's documented assertion that capitalization of Shen-3 between Q4 2014 and Q2 2016 was acceptable because a "reasonable possibility" existed that the well would be used an injection well was not supported by an appropriate analysis, inconsistent with the documents and testimony referenced above in paragraph 66 and contradicted by relevant GAAP.

C. ANADARKO REPEATEDLY FAILED TO EXPENSE AND DISCLOSE MILLIONS OF DOLLARS IN SHEN-3-RELATED DRY HOLE EXPENSES DURING EACH OF THE RESPECTIVE FINANCIAL REPORTING PERIODS BETWEEN DECEMBER 31, 2014 AND JUNE 30, 2015, IN VIOLATION OF GAAP

69. Anadarko's continued capitalization of Shen-3 violated GAAP. Specifically, from the financial reporting periods between December 31, 2014 and June 30, 2016, Anadarko improperly capitalized approximately \$63.6 million of suspended drilling costs relating to Shen-3.¹⁰⁶
1. *Anadarko's Overstatement and Disclosure of Shen-3 Suspended Well Costs Were Material*
70. As set forth below, the Company's related misstatement was material to each of Anadarko's respective financial reporting periods beginning December 31, 2014 and ended September 30, 2016. In this regard, Anadarko's recurring misstatement exceeded well-established SEC quantitative materiality example benchmarks (*i.e.*, 5% of an item). Qualitatively, the Company's misstatements and related disclosures: (i) allowed Anadarko to report pre-tax profits instead of losses during 2014, and/or (ii) pertained to an exploration project that was announced to have a potentially significant role in the Company's operations and profitability. In this regard, Anadarko regularly asserted the importance of Shenandoah in

¹⁰⁵ Memo and attachments, APC-01737346-7348.

¹⁰⁶ Offshore Exposure - Dec 2014_Final_Suspended & Drilling, APC-00156333.

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the Gulf of Mexico, characterizing the Shenandoah Basin as an approximate “\$2-\$4 Billion Net Opportunity” during 2014.¹⁰⁷

71. GAAP and SEC disclosure requirements discussed above apply to financial reporting requirements that are “material” to Anadarko’s financial statement users.¹⁰⁸ SEC Rule 12b-2 defines “material” as information for “which there is a substantial likelihood that a reasonable investor would attach importance in determining whether to buy or sell the securities registered.”¹⁰⁹ In 1999, the SEC staff issued Staff Accounting Bulletin No. 99, Materiality (“SAB 99”). SAB 99, codified under GAAP at ASC 250-10-S99, which provides further guidance with respect to materiality and states that a misstatement or omission in financial statements is material if “there is a substantial likelihood that a reasonable person would consider it important.”¹¹⁰

[T]he accounting literature is in substance identical to the formulations used by the courts in interpreting the federal securities laws. **The Supreme Court has held that a fact is material if there is – a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the “total mix” of information made available [fn 27] ...**

In the context of a misstatement of a financial statement item, while the “total mix” includes the size in numerical or percentage terms of the misstatement, it also includes the factual context in which the user of financial statements would view the financial statement item. ... **Materiality concerns the significance of an item to users of a registrant’s financial statements. A matter is ‘material’ if there is a substantial likelihood that a reasonable person would consider it important.**

^{FN}27 TSC Industries v. Northway, Inc., 426 U.S. 438, 449 (1976). See also Basic, Inc. v. Levinson, 485 U.S. 224 (1988). As the Supreme Court has noted, determinations of materiality require ‘delicate assessments of the inferences a ‘reasonable shareholder’ would draw from a given set of facts

¹⁰⁷ 2014 Anadarko Investor Conference Presentation, March 4, 2014, p. 83.

¹⁰⁸ 17 CFR §240.12b-20.

¹⁰⁹ 17 CFR §240.12b-2.

¹¹⁰ ASC 250-10-S99.

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and the significance of those inferences to him. [...]’ TSC Industries, 426 U.S. at 450.¹¹¹

72. ASC 250-10-S99 further notes **that an assessment of materiality requires an evaluation of both quantitative and qualitative factors.**¹¹² As discussed below, quantitative and qualitative factors demonstrate that Anadarko’s recurring misstatements and related disclosure omissions were material under GAAP.

- a) Quantitative Factors Reflect That Anadarko’s Failure to Properly Write-off Shen-3 drilling Costs to Dry Hole Expense Was Material

73. Quantitatively, SEC guidance acknowledges the practice of applying a “rule of thumb” quantitative threshold (*e.g.*, 5% of an item) to provide a “preliminary” basis for evaluating materiality. For example, ASC 250-10-S99 states:

The use of a percentage as a numerical threshold, such as 5%, may provide the basis for a preliminary assumption that - without considering all relevant circumstances - a deviation of less than the specified percentage with respect to a particular item on the registrant’s financial statements is unlikely to be material. The staff has no objection to such a “rule of thumb” as an initial step in assessing materiality. **But quantifying, in percentage terms, the magnitude of a misstatement is only the beginning of an analysis of materiality;** it cannot appropriately be used as a substitute for a full analysis of all relevant considerations.

* * *

Evaluation of materiality requires a registrant and its auditor to consider all the relevant circumstances, and the staff believes that there are numerous circumstances in which misstatements below 5% could well be material.¹¹³

74. Anadarko’s misstatements and related disclosure omissions within the Company’s relevant financial statements repeatedly exceeded this 5% threshold. For example, the proper inclusion and disclosure of Shen-3 related dry hole expense as of December 31, 2014 would have negatively impacted Anadarko’s respectively reported annual Income (Loss) before taxes and disclosed dry hole expense by an amount much greater than 5%.

¹¹¹ ASC 250-10-S99 (emphasis added).

¹¹² ASC 250-10-S99 (emphasis added).

¹¹³ ASC 250-10-S99 (emphasis added).

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75. Moreover, given the Company's repeated failure to correct its Shen-3 related misstatement until Q3 2016, GAAP requires that a quantitative materiality assessment be conducted using both a rollover method and an iron curtain approach.¹¹⁴ As stated in footnote 114, (i) the rollover approach quantifies a misstatement based on the amount of the error originating in the current period income statement, and (ii) the iron curtain approach quantifies a misstatement based on the effects of correcting the misstatement existing in the balance sheet at the end of the respective current period, irrespective of the misstatements year(s) of origination. As reflected in the table below, Anadarko's misstatement exceeded 5% of the following relevant disclosed amounts (*i.e.*, Income (loss) before taxes, Suspended well costs, and Dry hole expense) for one or more of these criteria using both the rollover approach (*e.g.*, Q4 2014, FY 2014 impact, Q3 2016), and the iron curtain approach (*e.g.*, Q1 2015 through Q2 2016):¹¹⁵

¹¹⁴ The SEC and codified GAAP recognize that the most commonly used in practice to accumulate and quantify misstatements are generally referred to as the "rollover" and "iron curtain" approaches. The rollover approach quantifies a misstatement based on the amount of the error originating in the current period income statement. Thus, this approach ignores the effects of correcting the portion of the current period balance sheet misstatement that originated in prior periods. The iron curtain approach quantifies a misstatement based on the effects of correcting the misstatement existing in the balance sheet at the end of the current period, irrespective of the misstatements year(s) of origination. SEC guidance further states that a registrant's financial statement would require adjustment when either of the rollover or iron curtain approaches result in quantifying a misstatement that is material, after considering all relevant quantitative and qualitative factors:

The staff believes registrants must quantify the impact of correcting all misstatements, including both the carryover and reversing effects of prior year misstatements, on the current year financial statements. The staff believes that this can be accomplished by quantifying an error under both the rollover and iron curtain approaches as described above and by evaluating the error measured under each approach. **Thus, a registrant's financial statements would require adjustment when either approach results in quantifying a misstatement that is material**, after considering all relevant quantitative and qualitative factors.

ASC 250-10-S99 (emphasis added).

¹¹⁵ **Note:** Pursuant to required use of the iron curtain and rollover methods, these calculations evaluate Anadarko's ongoing failure to expense Shen-3 and related misstatement across the various periods presented. These percentages were calculated using Offshore Exposure - Dec 2014 Final Suspended & Drilling, APC-00156333; 2015.03.31 Q1.GG.10SW AGING AND NET CHANGES - 04.20, KPMG_APC_0021079; 2015.07.14 Q2.GG.10 SW AGING, KPMG_APC_0009967; 2015.10.14 Q3.GG.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0003445; 2016.01.19 GG.4.A.8.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0006098; 2016.03.31 Q1.GG.10 SW AGING AND

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Percentage Impact of Misstatements on Various Financial Metrics					
	Q4 2014	FY 2014	Q1 2015	Q2 2015	Q3 2015
Income (Loss) Before Income Taxes	14.1%	117.9%	1.4%	34.8%	2.1%
Suspended Exploratory Well Costs	4.2%	4.2%	4.2%	3.8%	5.8%
Dry Hole Expense	27.1%	8.4%	229.0%	495.4%	7.9%
	Q4 2015	FY 2015	Q1 2016	Q2 2016	Q3 2016
Income (Loss) Before Income Taxes	2.9%	0.7%	4.6%	6.9%	6.3%
Suspended Exploratory Well Costs	5.7%	5.7%	5.7%	5.1%	5.5%
Dry Hole Expense	33.1%	6.1%	580.0%	1276.0%	31.4%

b) Qualitative Factors Further Demonstrate That Anadarko's's Failure to Properly Account for and Disclose Shen-3 Drilling Costs Was Material

76. While the assessment of quantitative factors is necessary and provides a preliminary basis for establishing the materiality of Anadarko's misstatements and disclosure omissions, the consideration of qualitative factors further supports that conclusion. In this regard, ASC 250-10-S99 recognizes that the evaluation of qualitative factors is an integral component of a materiality analysis. For example, the SEC Staff has stated that qualitative factors may render a quantitatively small misstatement material:

[I]f qualitative factors can cause small errors to be material, can qualitative factors cause large errors to be not material? With the benefit of hindsight, it's pretty clear that the answer is yes.¹¹⁶

77. ASC 250-10-S99 identifies several considerations that may render material quantitatively small misstatements, including the following examples:

- a. "whether the misstatement changes a loss into income or visa versa";

NET CHANGE, KPMG_APC_eA_0007094; 2016.06.30 Q2.GG.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0007189; GG.4.G.3.40 9-30-2016 Dry Hole Expense, KPMG_APC_eA_0008256 and reported financial statement amounts included in Anadarko's 2014 Form 10-K; Current Report on Form 8-K filed February 2, 2015, Q1 2015 Form 10-Q; Q2 2015 Form 10-Q; Q3 2015 Form 10-Q; 2015 Form 10-K; Current Report on Form 8-K filed February 1, 2016; Q1 2016 Form 10-Q; Q2 2016 Form 10-Q; Q3 2016 Form 10-Q.

¹¹⁶ Todd E. Hardiman, Associate Chief Accountant, SEC Division of Corporation Finance, "Remarks before the 2007 AICPA National Conference on Current SEC and PCAOB Developments," December 11, 2007.

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- b. “whether the misstatement concerns a segment or other portion of the registrant’s business that has been identified as playing a significant role in the registrant’s operations or profitability”; and
- c. “whether the misstatement has the effect of increasing management’s compensation.”¹¹⁷

78. These qualitative considerations further support my opinion that Anadarko’s failure to properly expense and disclose suspended Shen-3 drilling costs was material. For example, the Company’s failure to properly recognize Shen-3 costs as a dry hole expense during the year ended December 31, 2014 allowed Anadarko to report income before taxes. If these costs had been expensed during 2014, Anadarko would have reported a net loss before taxes.

79. Moreover, given Anadarko’s asserted potential significance of the Shenandoah project, including Shen-3, on the Company’s future operations and profitability, Anadarko’s disclosures asserting the success of Shen-3, despite it being a dry hole, further supports the materiality of Anadarko’s misstatement and related disclosure omissions.¹¹⁸ Indeed, Robert Gwin, Anadarko’s former Chief Financial Officer and President, acknowledged the Company’s stock price increased following the discovery of Shen-2 and internal communications speculating that Anadarko’s stock would exceed \$100 per share because of the Shenandoah basin project.¹¹⁹

¹¹⁷ ASC 250-10-S99.

¹¹⁸ ASC 250-10-S99 (“Among other factors, the demonstrated volatility of the price of a registrant’s securities in response to certain types of disclosures may provide guidance as to whether investors regard quantitatively small misstatements as material. Consideration of potential market reaction to disclosure of a misstatement is by itself ‘too blunt an instrument to be depended on’ in considering whether a fact is material. When, however, management or the independent auditor expects (based, for example, on a pattern of market performance) that a known misstatement may result in a significant positive or negative market reaction, that expected reaction should be taken into account when considering whether a misstatement is material.”).

¹¹⁹ Ex. 441; Deposition of Robert Gwin, 77:18-79:15 (“Q And one of the headlines that they deem important for that day related to the Shenandoah results, Shenandoah 2 results; correct? A I have to go back down. I know it says something about ConocoPhillips. Yes, that’s correct. Q And ConocoPhillips was a partner on the Shenandoah prospect; right? A That’s correct. Q And so after you received this briefing, Chuck Meloy responded to -- replied all with a jubilant response; right? A Yes, he did. Q It was, ‘Booyah and thumbs up to our exploration team once again’? A Yes. Q That was referring to the news at

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80. In this regard, the importance of both Shenandoah and Shen-3 were repeatedly communicated by Anadarko's management and others. For example:
- a. As early as February 2013, Anadarko's management characterized Shenandoah as a **"big exploration"** project, noting further that it was **"very encouraged"** by what the Company was seeing.¹²⁰
 - b. In May 2013, Mr. Walker observed that "[a]ccelerating the value of the newly discovered Shenandoah Basin" was **"critical"** given that it was **"one of the company's largest discoveries ever in the Gulf of Mexico."**¹²¹
 - c. Weeks later, Frank Patterson, Anadarko's Senior Vice President of Exploration, similarly observed that "[i]n the Gulf of Mexico, Ernie [Leyendecker] is very excited about the Gulf of Mexico. How can you not get excited when you start the year with a well, the Shenandoah appraisal well, where you have over 1,000 feet of pay. **Shenandoah could end up being one of the largest discoveries in the Gulf of Mexico, we don't know. We have appraisal work that we have to do so we're pretty excited about that.**"¹²²
 - d. Expressing continued excitement about Shenandoah in the Company's Q2 2013 earnings call, Robert Daniels, Anadarko's Executive Vice President - International &

Shenandoah; right? A Yes. It appears to be. Chuck ran our development organization and so he was congratulating exploration organization on their success with that well. And Al Walker responds with a 'I will second that. We are on our way to three digits.' And what do you -- what did you understand Al Walker's email to refer to? A I don't know. I wouldn't speculate. I don't remember getting the email even though I was clearly on it and then I responded to everyone congratulations as well obviously. Q And his reference -- Mr. Walker's reference to three digits, do you understand that to be the stock price? A It could have been, yes. I don't know where our stock was trading at that time. So I don't know that it was. It could have been. Q It's a reasonable assumption; right? A I think it's reasonable. Q And so Al Walker is saying that the good exploration news from Shenandoah meant that the Anadarko stock price was on its way to over \$100 per share? A I think it's reasonable to assume that, but again, I don't know what he's specifically referring to. Q It's a reasonable conclusion? A I think as I already stated, it's reasonable.").

¹²⁰ Shareholder/Analyst Call, February 20, 2013 (emphasis added).

¹²¹ Q1 2013 Earnings Call, May 7, 2013, p. 5 (emphasis added).

¹²² Company Conference Presentation, May 22, 2013, p. 8 (emphasis added).

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Deepwater Exploration, stated that Anadarko was “excited about the whole Shenandoah mini-basin. **We have the big discovery at Shenandoah.**”¹²³

- e. When further asked by an analyst in September 2013 whether a third well would be drilled in Shenandoah, Mr. Walker stated: **“You bet. We will be looking at a lot of things in Shenandoah. We’re pretty excited, as you might imagine, with 1,000 feet of pay.”**¹²⁴ More generally, Mr. Walker expressed his excitement about the Company’s future given the Gulf of Mexico, including Shenandoah, noting that:

[W]e’ve come out of this with some very significant results. And I think you’ve heard us talk a lot about the Shenandoah-2 recently. And I think Shenandoah and that whole mini basin is something that Ernie Leyendecker and our Gulf of Mexico exploration folks are just delighted and very excited about. We had about 1,000 feet of pay in the second Shenandoah well. We also had around 400 feet of pay in the Coronado well, and in the Yucatan well, we were at about 120 feet of pay.

Now we’re the only company that’s in all 3 of these. So we have a bit of a unique view of what this basin might be able to provide in the future.¹²⁵

- f. In late 2013, when asked about future prospects that support the Company’s cash flows, Mr. Gwin conveyed that Shenandoah stood out:

Shenandoah, I think, is one that’s easy to look at and say if you saw what we did with Lucius and that Lucius spar I showed you, we’re building an identical spar. We designed it once and we’re building it twice for Heidelberg. **If we were to look at what’s the kind of the most attractive next step here, even though, obviously, there’s a lot of additional work to do, Shenandoah stands out.**¹²⁶

¹²³ Q2 2013 Earnings Call, July 30, 2013, p. 8 (emphasis added).

¹²⁴ Company Conference Presentation, September 12, 2013, p. 1 (emphasis added).

¹²⁵ Company Conference Presentation, September 12, 2013, p. 8 (emphasis added).

¹²⁶ Company Conference Presentation, September 12, 2013, p. 13 (emphasis added).

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- g. In November 2013, Mr. Leyendecker described Shenandoah as “one of the most exciting things” that he has “done” and “seen” in his career. He expressed this excitement in terms of being for both the “industry and for Anadarko.”¹²⁷
- h. Mr. Daniels described the Company’s next exploratory steps, including its desire to find oil/water contact in February 2014, noting:

Of course, the 2013 appraisal well found 1,000 feet of pay and no oil/water contact, so we’re going to be trying to push the oil/water contact out and look at the aerial extent of these reservoirs, which we do think are very are [sic] aerial-extensive based on the drilling we’ve done in here.¹²⁸

- i. During its March 2014 investor conference presentation, the Company described the Shenandoah Basin as a “\$2-\$4 Billion Net Opportunity.”¹²⁹
- j. Anadarko’s management continued to reference the success of Shenandoah during its May 2014 conferences calls, describing the basin as “being quite a sizable potential producer”¹³⁰ and “one of the best-looking logs ... seen in a long time, big, thick, thousand foot-type of pay.”¹³¹
- k. In October 2014, Mr. Daniels publicly recognized the specific importance of Shen-3 to the Shenandoah project stating in part that Anadarko was “still excited about the Shenandoah Basin,” and that “**Shenandoah 3 is going to be real key for us.**”¹³² Less than one month later, Mr. Daniels reiterated his excitement about Shenandoah, noting further that the drilling of Shen-3 was almost complete and the Company would provide an update on the results during its next conference call.¹³³

¹²⁷ Company Conference Presentation, November 22, 2013, p. 7 (emphasis added).

¹²⁸ Q4 2013 Earnings Call, February 4, 2014, p. 16.

¹²⁹ 2014 Anadarko Investor Conference Presentation, March 4, 2014, p. 83.

¹³⁰ Q1 2014 Earnings Call, May 6, 2014, p. 12.

¹³¹ Company Conference Presentation, May 20, 2014, p. 8.

¹³² Q3 2014 Earnings Call, October 29, 2014, p. 9 (emphasis added).

¹³³ Company Conference Presentation, November 13, 2014, p. 7.

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81. While the drilling results became evident during the Company's Q4 2014 financial reporting period, Anadarko's failure to write off its "unsuccessful" Shen-3 drilling costs as dry hole expense was a significant failure, especially in consideration of the aforementioned positive expectations of the Shenandoah project. Of further significance was Anadarko's other 2014 disclosures that did not explicitly acknowledge that Shen-3 was a dry hole or wet well.¹³⁴ Instead, Anadarko disclosed the favorable outcome of its Shen-3 well, characterizing it as a "very successful appraisal well,"¹³⁵ and in March 2015 generally noted that Shenandoah was "[a]dvancing [t]oward [d]evelopment."¹³⁶
82. More specifically, following Anadarko's Q4 2014 earnings release and operations report (which contained positive and incorrect statements regarding Shenandoah, particularly about finding 50% more resources rather than actually finding less, see for example paragraph 41, and its related footnotes),¹³⁷ BofA Merrill Lynch's Investment Researcher, Douglas Blyth Leggate, referenced Anadarko's report regarding Shenandoah, including Shen-3, and inquired about the Company's plans for project development.¹³⁸ In response,

¹³⁴ Q4 and Full Year 2014 Earnings Call, February 3, 2015, Anadarko Current Report on Form 8-K, February 2, 2015, Anadarko 2014 Form 10-K.

¹³⁵ 2015 Earnings Guidance Update Call, March 3, 2015, p. 12 ("Let's look at some more details of a couple of our focus areas, starting in the deepwater Gulf of Mexico. We're excited about the advancement at Shenandoah. We pushed down-dip on Shenandoah 3, searching for the oil-water contact, looking for reservoir continuity and quality and to get a core in the down-dip portions of the reservoir. This was a very successful appraisal well.").

¹³⁶ 2015 Anadarko Investor Conference Call Presentation, March 3, 2015, p. 47.

¹³⁷ Fourth-Quarter 2014 Operations Report dated February 2, 2015, APC-00002814-2830 at 2825 ("Drilling of the second Shenandoah appraisal well, Shenandoah-3, concluded in the quarter. The Shenandoah-3 well found approximately 50% (1,470 feet) more of the same well-developed reservoir sands 1,500 feet down-dip and 2.3 miles east of the Shenandoah-2 well, which encountered more than 1,000 feet of net oil pay in excellent quality, Lower Tertiary-aged sands. The Shenandoah-3 well confirmed the sand depositional environment, lateral sand continuity, reservoir qualities and down-dip thickening. The well also enabled the projection of oil/water contacts based on pressure data, and reduced the uncertainty of the resource range."); Current Report on Form 8-K dated February 2, 2015 ("Appraisal activity offshore Côte d'Ivoire at the Paon discovery and in the Gulf of Mexico at the Shenandoah discovery continued to validate the company's geologic models around these apparent commercial discoveries.")

¹³⁸ Q4 and Full Year 2014 Earnings Call, February 3, 2015, p. 7.

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on February 3, 2015, Mr. Daniels conveyed management's excitement at Shenandoah and the "very good" project results:

At Shenandoah, start there, we're so excited about what we're seeing there. We've got very good results for what we set out to do at the most recent appraisal well. If you remember, that appraisal well was several miles away and about 1,500 feet down dip of the #2. I guess 2.3 miles to the east and 1,500 feet down dip. And we were looking to see if we could establish oil-water contacts at that location, so we knew we'd be very far down dip and close to that. We wanted to look at the lateral sand and the reservoir continuity. We wanted to look at the quality of the sands in that area because as we get down closer to the oil-water contact, we have to get an idea about the drive mechanism. And would we have an effective water drive and -- for a recovery. We had a model that we would see potential interval expansion as we moved off structure. And then we wanted to get pressure data to show pressure continuity into the other #2 well. **So overall, we're looking to understand the oil in place better and the potential recovery mechanisms.** And if you look at the results, we really did all of that. We have excellent lateral sand continuity. The packages are all present. They're very well correlatable, they've expanded. So that model of expansion did work out. **We ended up with about 1,470 feet of gross sand section versus 1,000 feet that we had in the #2 well. The oil-water contacts were not encountered in the well. But based on the pressure data, we were able to project those up. So we got a much better handle on the oil in place and that has expanded with more confidence on it. So that was a very positive thing. Reservoir quality was good, so that gives us a lot of confidence on the potential for the water drive. So we've got a lot more confidence on our geologic model on the eastern side.**¹³⁹

83. Anadarko reiterated its Shen-3 well results in its 2014 Annual Report on Form 10-K.¹⁴⁰

Notably, these and other disclosures (*e.g.*, managements' disclosed assertion that the Shenandoah basin represented a \$2-\$4 billion net opportunity)¹⁴¹ are in contrast to the "bad

¹³⁹ Q4 and Full Year 2014 Earnings Call, February 3, 2015, p. 8 (emphasis added).

¹⁴⁰ Anadarko 2014 Form 10-K, p. 9 ("The Company spud the Shenandoah-3 well, its second appraisal well at the Shenandoah discovery, in the second quarter of 2014. The well finished drilling at the end of 2014 and found approximately 50% (1,470 feet) more of the same reservoir sands 1,500 feet down-dip and 2.3 miles east of the Shenandoah-2 well, which encountered over 1,000 feet of net oil pay in excellent quality Lower Tertiary-aged sands. The Shenandoah-3 well confirmed the sand depositional environment, lateral sand continuity, excellent reservoir qualities, and down-dip thickening. The well also enabled the projection of oil-water contacts based on pressure data and reduced the uncertainty of the resource range.").

¹⁴¹ 2014 Anadarko Investor Conference Presentation, March 4, 2014, p. 83.

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news,” “unsuccessful,” “wet well,” and “dry hole” characterizations of Shen-3 noted above beginning at paragraph 41. Moreover, these disclosures were inconsistent with information reflecting that as a result of Shen-3, Anadarko’s estimated gross oil reserves in the Shenandoah area actually decreased from a mean 1200 MMBOE after drilling Shen #2, to a mean of between 740 MMBOE (with fault) and 920 MMBOE (without fault) (a 23% to 38% decrease in estimated oil reserves).¹⁴²

84. In this regard, Patrick McGrievy, Anadarko’s former Deepwater Gulf of Mexico General Manager, testified that based on the preliminary results from Shen-3, there were concerns regarding Shenandoah’s size and commerciality.¹⁴³ Mr. McGrievy further testified that the findings from Shen-3 resulted in a significant downward revision to the resource size of Shenandoah.¹⁴⁴

¹⁴² Email from Jake Ramsey with Attached Resource Estimate dated November 22, 2014, APC-00617381; Shenandoah Resource Estimate APC-00617383. *See also* email from Pat McGrievy dated January 26, 2015, APC-00863988-3989.

¹⁴³ Deposition of Patrick McGrievy, 147:15-149:4 (“And Lea Frye’s e-mail on October 1st, 2014, says, ‘Dan from COP called me’ -- is that ConocoPhillips? A. Yes, it is. Q. -- ‘and wanted to chat. Based on Shen 1 pressures and the new interpreted raft areas COP is concerned. He has run some volume sensitivities with new maps and OWC variance and is seeing in place volumes basically cut in half. They are very concerned about size and commerciality.’ [As read] Does that refresh your recollection about what ConocoPhillips’ concerns were around this time? A. Yes. Q. And so at this point, based on preliminary results from Shen 3, they were concerned about Shenandoah’s size and commerciality? A. Yes. Q. And they were seeing the volumes being cut in half? A. Evidently so, as per Lea Frye, right. ... Q. And do you have any reason to doubt that she conveyed to you the same concerns that Lea relayed in this e-mail? A. I don’t have any reason to believe otherwise, no. Q. And that’s -- that’s generally your recollection, that ConocoPhillips was concerned at this point in time once preliminary results came from Shen 3? A. Yeah, I think so.”).

¹⁴⁴ Deposition of Patrick McGrievy, 149:17-150:14 (“Q. And the well results from Shen 3 which found no hydrocarbons resulted in a significant downward revision to the resource size of Shenandoah 3? A. Yep. Yes, it would have. Q. So ConocoPhillips had to about cut in half internally -- internally. At the development team, was it also cut in half? A. Can you re- -- repeat the question again? I’m sorry. Q. So just reading this and referring to the volumes being cut in half -- A. Right. Q. -- that was ConocoPhillips’ view. Was that also the view of the development team? A. I don’t recall specifically on what volumes or how much we cut our volumes back by. It could have been. Q. But it was -- A. I just don’t recall. Q. -- it was a significant revision? A. It was a large revision, yeah, downward.”).

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85. Also, reflecting on the sensitivity and importance of avoiding making negative comments about the Shenandoah Basin, Anadarko's CEO, Robert Walker¹⁴⁵ and its CFO, Robert Gwin,¹⁴⁶ avoided, in earnings calls or other disclosures, that Shen-3:
- a. Was a wet well.
 - b. Reduced the resource range (MMBOE).
 - c. Had technological challenges.
 - d. Execution risk.
 - e. A major fault.
86. The Shen-3 results and the associated reduction in resource estimates was further significant considering that management's bonus were affected by performance goals that included consideration of MMBOE sales and related reserves (representing an aggregate performance goal weighting factor ranging from 45% - 50%).¹⁴⁷ Although the Shenandoah basin project, including Shen-3, was exploratory in nature and in fact, a dry hole, the failure to appropriately expense Shen-3 as a dry hole expense indicated an increased possibility that the well could be used as a producing well to extract oil resources that could impact management performance goals and related compensation in the future.¹⁴⁸ In this

¹⁴⁵ Deposition of Robert Walker, *e.g.*, 172:13 – 175:18, and 193:6 – 193:25.

¹⁴⁶ Deposition of Robert Gwin, *e.g.*, 130:19-131:8, 137:16-139:3, 142:22-144:3, 188:17-25, 213:2-16, 228:21-239:71.

¹⁴⁷ *See, e.g.*, Proxy Statement on Form Schedule 14A, March 18, 2016, 42-45; Proxy Statement on Form Schedule 14A, March 23, 2015, 44-46.

¹⁴⁸ *See also* Deposition of Lea Frye, 20:25-21:15 (“So could you restate -- given what we’ve talked about, could you restate what the exploration bonus was based on in your experience? A It was based on meeting or exceeding meeting a particular value of MMBOE or millions of barrels of oil equivalent found in a particular year. Q And who set the target for the exploration unit in terms of the MMBOE that were to be found in a particular year? A I would not know who all was involved, but it would have been a higher level of management that set that. Q And who was management at that point in time for exploration? A There was Bob Daniels was senior VP, I believe, if the title is correct.”).

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regard, materiality evaluations under relevant accounting guidance requires a consideration of the “total mix” of information made available.

87. In consideration of both the quantitative and qualitative factors described above, the Company’s failure to properly recognize and disclose the aforementioned unsuccessful findings associated with the Shen-3 dry hole was material to each of the respective financial reporting periods beginning December 31, 2014 and ended September 30, 2016.

D. GAAP REQUIRED ANADARKO TO IMPAIR AND EXPENSE, ASSETS CAPITALIZED IN CONNECTION WITH THE SHENANDOAH BASIN PROJECT WHEN SUBSTANTIAL DOUBT ABOUT THE PROJECT’S ECONOMIC VIABILITY EXISTED

88. In addition to having capitalized suspended drilling costs associated with Shen-3, Anadarko capitalized other exploration costs associated with the Shenandoah basin project during the Relevant Period. These amounts included non-producing leasehold (“NPLH”) costs, the suspended well costs associated with other exploration-type wells (*i.e.*, Shen-1, Shen-2, Shen-4, Shen-5, etc.), and other related costs. These collective amounts ranged from approximately \$769.9 million and \$786.6 million between December 31, 2015 and December 31, 2016.¹⁴⁹
89. Relevant GAAP applicable to unproven properties and exploratory wells, including the Company’s Shenandoah project, required that Anadarko periodically assess whether such properties (and related assets) were impaired during the Relevant Period.¹⁵⁰ As described below, GAAP required that Anadarko impair and expense, Shenandoah basin project assets when “substantial doubt” about the project’s economic viability existed (*i.e.*, by December 31, 2015 as noted in Condition 3). This requirement is consistent with the understanding that unsuccessful exploration efforts be immediately recorded on the income statement as

¹⁴⁹ 2016.12.31 GG.4.A.8.10 SW AGING AND NET CHANGE, KPMG_APC_0008143; 2016.06.30 Q2.GG.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0007189; 2016.01.19 GG.4.A.8.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0006098; 2016.12.31 GG.4.B.1.10 NPLH ROLLFORWARD, KPMG_APC_eA_0007983; 2016.03.31 Q1.GG.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0007094; 2016.09.30 Q3.GG.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0007376; 2014.12.31 GG.4.B.1.10 Q4 NPLH ROLLFORWARD, KPMG_APC_eA_0002543; 2014.12.31 GG.4.A.8.10 SW AGING, KPMG_APC_eA_0002531.

¹⁵⁰ ASC 932-360-35.

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an expense, as discussed in greater detail hereafter.¹⁵¹ It is further consistent with the Company's actual write off of all related Shenandoah basin project costs (*i.e.*, approximately, \$901.6 million) during the quarter ended March 31, 2017, when internal Anadarko documents reflect that the project was "economically challenged" and the "prevailing viewpoint is that there is little commercial or subsurface value to be gained through continued bi-annual appraisal drilling operations at Shenandoah, currently required for lease maintenance operations."¹⁵²

1. *The Required Impairment of Shenandoah Completed Exploration Wells and Exploratory-Type Stratigraphic Well Costs*

90. As of the respective financial reporting periods ended between December 31, 2015 and 2016, Anadarko had capitalized suspended exploratory wells and stratigraphic exploratory-type wells costs of between \$252.6 million and \$261.5 million as set forth below:

\$ in millions	12/31/15	3/31/16	6/30/16	9/30/16	12/31/16
Suspended Well Costs	\$260.2	\$261.5	\$259.8	\$252.6	\$255.2

91. ASC 932-360-35 required Anadarko to evaluate its progress in assessing reserves for those wells that had not been written off as dry holes (*e.g.*, Shen-1, Shen-2, etc.).¹⁵³ As set forth in the ASC guidance, to the extent that Anadarko failed (1) to make sufficient progress in assessing each specific well's reserves and the economic and operating viability of the project,¹⁵⁴ **or (2) when information obtained raised substantial doubt about the economic or operational viability of the Shenandoah project overall**, the Company was

¹⁵¹ See, *e.g.*, Deloitte Oil and Gas, *Accounting, Financial Reporting, and Tax Update*, January 2016, p.2.

¹⁵² Shenandoah Exploration and Development Teams Memo to Executive Committee Re: Recommendation to Proceed with Issuance of SOP at Shenandoah dated April 24, 2017, APC-01283759.

¹⁵³ ASC-932-360-35-13 and 18-20.

¹⁵⁴ FASB Staff Position, FAS 19-1 ("The FASB staff believes that exploratory well costs should continue to be capitalized provided the well has found a sufficient quantity of reserves to justify its completion as a producing well and the enterprise is making sufficient progress assessing the reserves and the economic and operating viability of the project."); ASC 932-360-35-19 ("All relevant facts and circumstances shall be evaluated when determining whether an entity is making sufficient progress on assessing the reserves and the economic and operating viability of the project.").

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required to expense capitalized costs associated with its respective wells, net of its salvage value, if any:

If the sufficient progress criteria (see paragraphs 932-360-35-18 through 35-20) is not met, or **if an entity obtains information that raises substantial doubt about the economic or operational viability of the project, the exploratory well or exploratory-type stratigraphic well shall be assumed to be impaired and its costs, net of any salvage value, shall be charged to expense.**¹⁵⁵

92. Consistent with these requirements, the Company disclosed in its 2015 and 2016 financial statements, that if “... information becomes available that raises substantial doubt as to the economic or operational viability” of a project, including Shenandoah, “the associated costs will be expensed at that time.”¹⁵⁶
93. Pursuant to the understanding that Plaintiffs will establish that by December 31, 2015 there was substantial doubt that the Shenandoah basin project (as a whole) would be economically viable (*i.e.*, Condition 3), Shenandoah-related assets were impaired under the relevant GAAP set forth above. In this regard and as explicitly stated within ASC 932-360-35-13, all suspended well costs associated with the Shenandoah Basin Project (*i.e.*, see paragraph 90 above) were required to be expensed, net of any salvage value, beginning as of December 31, 2015.

2. *The Required Impairment of Other Capitalized Costs Associated with The Shenandoah Basin Project*

94. As of the respective financial reporting periods ended between December 31, 2015 and 2016, Anadarko had also capitalized the following other costs which the Company directly attributed to the exploratory Shenandoah basin project:

\$ in millions	12/31/15	3/31/16	6/30/16	9/30/16	12/31/16
Non-Producing Leasehold Asset	\$462.7	\$462.7	\$458.4	\$458.4	\$458.4

¹⁵⁵ ASC 932-360-35-11 and 13 (emphasis added).

¹⁵⁶ Anadarko 2015 Form 10-K, p. 103; Anadarko 2016 Form 10-K, p. 105. *See also* Deposition of Catherine Green 42:17-21 (“Yes. If there’s substantial doubt about the economic and commercial viability of the project, the well cost or the well costs, if there are multiple suspended wells, should be charged to expense.”).

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\$ in millions	12/31/15	3/31/16	6/30/16	9/30/16	12/31/16
Capitalized Interest	\$46.9	\$54.0	\$61.7	\$68.0	\$69.0
Asset Retirement Obligations	\$0.0	\$0.0	\$0.0	\$0.0	\$4.0
Total	\$509.6	\$516.7	\$520.1	\$526.4	\$531.4

95. Anadarko was required to assess whether these unproved property-related¹⁵⁷ assets were also impaired.¹⁵⁸ Given that by December 31, 2015, there was substantial doubt that the Shenandoah basin project would be economically viable, a probable economic benefit relating to Shenandoah did not exist to support the continued capitalization of related project exploration costs.
96. Specifically, the term “substantial doubt” is described in GAAP to exist when a condition becomes “probable” or is “likely” to occur.¹⁵⁹ In the parlance of GAAP, Condition 3 reflects an understanding that the Shenandoah basin project was not likely to be economically viable and therefore, the economic viability of Shenandoah basin project was remote.¹⁶⁰
97. Given Condition 3, it is therefore unlikely that any additional exploratory efforts and costs undertaken by Anadarko would cause the Shenandoah basin project to become economically viable. Indeed, while Anadarko incurred additional exploratory costs

¹⁵⁷ Unproved properties are properties with no proved reserves. ASC Master Glossary.

¹⁵⁸ ASC-932-360-35-11.

¹⁵⁹ ASC Master Glossary (emphasis added) (“**Substantial doubt** about an entity’s ability to continue as a going concern **exists when conditions and events, considered in the aggregate, indicate that it is probable** that the entity will be unable to meet its obligations as they become due within one year after the date that the financial statements are issued (or within one year after the date that the financial statements are available to be issued when applicable). The term probable is used consistently with its use in Topic 450 on contingencies. ... Probable [meaning] [t]he future event or events are likely to occur.”).

¹⁶⁰ GAAP establishes three measures of probability under ASC Topic 450: (1) probable, (2) reasonably possible, and (3) remote. As defined above, probable is generally defined as “likely to occur.” Reasonably possible reflects a likelihood that is “more than remote but is less than likely.” Remote is generally defined to mean a “slight” likelihood of occurrence. ASC Master Glossary. Consistent with the characterization above, Anadarko disclosed that the Shenandoah wells were expensed during 2017 “as it was no longer reasonably possible that the wellbore could be used in the development of the project.” Anadarko 2017 Form 10-K, p. 109.

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subsequent to December 31, 2015,¹⁶¹ the related activities did not alter management's ultimate conclusion during the financial reporting period ended March 31, 2017, that its Shenandoah-related capitalized costs, including its NPLH assets, were fully impaired. Accordingly, pursuant to a determination that the Shenandoah basin project was not likely to be economically viable by December 31, 2015, GAAP required that Anadarko impair and expense other Shenandoah-related capitalized costs, including its NPLH assets.

98. As discussed above, the Company's accounting treatment during Q1 2017 is consistent with this conclusion. Specifically, given the determination that the Shenandoah project was "economically challenged" and the "prevailing viewpoint [wa]s that there [wa]s little commercial or subsurface value to be gained through continued bi-annual appraisal drilling operations at Shenandoah, currently required for lease maintenance operations,"¹⁶² Anadarko fully expensed all Shenandoah's related assets as impaired under GAAP.¹⁶³
99. Anadarko's external auditors similarly noted the following in connection with the Company's Q1 2017 write off of \$902 million in Shenandoah-related suspended well costs, NPLH assets and capitalized interest:¹⁶⁴

[T]he entire [suspended well cost] balance of the Shenandoah prospect was written off to dry hole in Q1 2017 as **the play was determined to be uneconomical and the Company's partners elected to not continue with exploration and development.** ...¹⁶⁵

* * *

[T]he Company and its partners lacked the management commitment to continue the exploration in the overall Shenandoah

¹⁶¹ Evidence reflects that leases pertaining to the Shenandoah basin project would expire upon Anadarko's failure to undertake drilling activities within specified time parameters. *See, e.g.*, Deposition of Lea Frye, 34:9-21 and 215:17-216:13; Deposition of Patrick McGrievy, 122:7-126:20; Email from Pat McGrievy dated 4/2/2014, APC-00004967 at 4967.

¹⁶² Shenandoah Exploration and Development Teams Memo to Executive Committee Re: Recommendation to Proceed with Issuance of SOP at Shenandoah dated April 24, 2017, APC-01283759.

¹⁶³ *See, e.g.*, Anadarko Q1 2017 Form 10-Q, p. 13.

¹⁶⁴ GG.41 3-31-2017 DRY HOLE EXPENSE MEMO, KPMG_APC_eA_0008471; Q1.GG.33.A Q1 3-31-2017 NPLH IMPAIR MEMO, KPMG_APC_eA_0008461.

¹⁶⁵ GG.4.A.8.05 12-31-2017 SUSPENDED WELLS MEMO, KPMG_APC_eA_0009163 at 9185 (emphasis added). *See also* GG.41 3-31-2017 DRY HOLE EXPENSE MEMO, KPMG_APC_eA_0008471.

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area. Given these considerations, KPMG notes it is not unreasonable or inappropriate for the entire balance of the leases above to be expensed through NPLH impairment.¹⁶⁶

100. Indeed, Ms. Green testified that the Company's lack of commitment to continue exploring the Shenandoah area referenced by KPMG above directly resulted from the "substantial doubts" about the economic viability of Shenandoah:

Q. And management was not committed because it had substantial doubts about the economic viability of Shenandoah; correct?

THE WITNESS: At March 31st, 2017, yes.¹⁶⁷

3. *Information Available is Consistent with The Understanding That There Was Substantial Doubt that the Shenandoah Basin Project (as a whole) Would Be Economically Viable*

101. While the opinions expressed in this report are based on the above noted conditions described above in paragraph 2, including Condition 3, I have reviewed the following information that is consistent with the conclusion that by December 31, 2015, there was substantial doubt that the Shenandoah basin project (as a whole) would be economically viable:

- a. As early as October 2014, Anadarko's partner, ConocoPhillips communicated to Lea Frye, Anadarko's Senior Staff Reservoir Engineer for the Company's operations in the Eastern Gulf of Mexico, that Conoco had basically cut its estimated oil volumes in half following additional interpretations of the Shenandoah basin.¹⁶⁸ As a result, Conoco further noted that it was "very concerned" about the size and commerciality of the Shenandoah project.¹⁶⁹
- b. Darrell Hollek, Anadarko's Senior Vice President of Deepwater Operations in the Gulf of Mexico, testified that a general guideline and hurdle utilized for consideration of

¹⁶⁶ Q1.GG.33.A Q1 3-31-2017 NPLH IMPAIR MEMO, KPMG_APC_eA_0008461 at 8462 (emphasis added).

¹⁶⁷ Deposition of Catherine Green, 146:24-147:8.

¹⁶⁸ Exhibit 259, Email from Lea Frye dated October 2, 2014, APC-00013459 at 3459.

¹⁶⁹ Exhibit 259, Email from Lea Frye dated October 2, 2014, APC-00013459 at 3459.

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whether to transition an exploratory project like Shenandoah to commercial development was a PIR10 factor of .30.¹⁷⁰ The following evidence reflects a PIR 10 factor less than .30:

1. In March 2015, Ms. Frye, developed and circulated an economic analysis for the Shenandoah project reflecting PIR10 measures below .30 and in several instances, negative amounts.¹⁷¹ Only assuming a 10% probability (“P10”) and an \$85 price per barrel of crude oil, did the PIR10 measure exceed .30.¹⁷² Notably, during March 2015, the closing price of crude oil ranged from \$43.46 to \$51.53, well below the \$85 price per barrel supporting a PIR10 above .30.¹⁷³ In that same chart, the PIR10 measure at \$60 per barrel was .13 while a 50% PIR was -.01.
2. In a January 2016 email, Pat McGrievy circulated recommended economics associated with the Shenandoah basin project.¹⁷⁴ As conveyed in both the email and the attached economic summary slides, Mr. McGrievy identified and recommended a “riskd PIR of .22,” well below the .30 threshold above at \$60 per barrel.¹⁷⁵

¹⁷⁰ Deposition of Darrell Hollek, 53:6-54:4 (“There’s a reference here to what commercial development would require to generate to generate a ‘PIR 10=0.30.’ Do you see that? A. Yeah. Q. And was a PIR 10 of .30 generally a threshold for Anadarko to consider a prospect commercial? A. I don’t remember exactly, that -- but that may have been a minimum threshold. Q. And would that have been set forth in any policies? A. I wouldn’t say a policy; maybe a general guideline. Q. Do you recall what the document was called? A. No, I don’t. Q. But in practice, you recall that .3 was generally considered the threshold? A. I believe that was sort of a hurdle rate. THE COURT REPORTER: A what rate; hurdle rate? THE WITNESS: Yes. Basically an economic threshold to be even considered.”)

¹⁷¹ Exhibit 300, Email from Lea Frye dated March 23, 2015, APC-00025532-5533.

¹⁷² Exhibit 300, Email from Lea Frye dated March 23, 2015, APC-00025532-5533.

¹⁷³ <https://finance.yahoo.com/quote/CL%3DF/history?period1=1419984000&period2=1514678400&interval=1d&filter=history&frequency=1d&includeAdjustedClose=true>.

¹⁷⁴ Exhibit 269, Email from Pat McGrievy dated January 19, 2016, APC-00060382-0383.

¹⁷⁵ Exhibit 269, Email from Pat McGrievy dated January 19, 2016, APC-00060382-0383.

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Case Description		Invest \$60/bbl	
		Net AT NPV10 (\$MM)	AT PIR10
Zero Contingency	Riskied Mean	237	0.28
	Unriskied Mean	283	0.30
Facility Only Contingency	Riskied Mean	182	0.19
	Unriskied Mean	221	0.21
Recommended Contingency	Riskied Mean	174	0.18
	Unriskied Mean	212	0.20
Recommended Contingency (20K Well Rates)	Riskied Mean	191	0.20
	Unriskied Mean	232	0.22
Recommended Contingency (20K Well Rates Optimized)	Riskied Mean	208	0.22
	Unriskied Mean	250	0.24

3. Notably, while the above analysis assumed a \$60 price per barrel (bbl) of crude oil, the actual price of crude oil at the end of 2015 averaged less than \$40/bbl.¹⁷⁶ Indeed the average price of crude oil would not equal or exceed \$60/bbl until late December 2017.¹⁷⁷

- c. By December 2016, prior to the Q1 2017 write-off of Shenandoah related assets, Anadarko's Controller, Chris Champion appeared to have communicated that such a write down of Shenandoah assets was "imminent."¹⁷⁸ Consistent with this amount, the Company's disclosed 12%-14% annual oil growth rate for the five future years ended 2020, assumed that no investment in Shenandoah would be made.¹⁷⁹

¹⁷⁶ <https://finance.yahoo.com/quote/CL%3DF/history?period1=1419984000&period2=1514678400&interval=1d&filter=history&frequency=1d&includeAdjustedClose=true>.

¹⁷⁷ <https://finance.yahoo.com/quote/CL%3DF/history?period1=1419984000&period2=1514678400&interval=1d&filter=history&frequency=1d&includeAdjustedClose=true>.

¹⁷⁸ Email from Pat McGrievy dated March 31, 2017, APC-00307805. *See also* Deposition of Patrick McGrievy, 271:13-272:2 (emphasis added) ("Q. Could you -- could you read the next sentence, please? A. 'I understand, talking with Luis, that Chris Champion did set the stage with some of the executive team in 2016' -- 'December, 2016 to let them know that a fairly substantial write-down at Shenandoah would be imminent in 2017.' Q. **So to the best of your understanding, the executive team was apprised as of the end of 2016, that there would be a write-off or a write-down at Shenandoah in 2017?** A. **That's what Chris Champion told me.** Q. **Do you have any reason to doubt that was true?** A. **No, I really don't.**").

¹⁷⁹ Anadarko Form 8-K, January 31, 2017; Email from Darrell Hollek dated December 15, 2016, APC-00290058.

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E. ANADARKO REPEATEDLY FAILED TO EXPENSE AND PROPERLY DISCLOSE SHENANDOAH-RELATED SUSPENDED WELL COSTS, LEASEHOLD COSTS AND OTHER CAPITALIZED COSTS DURING EACH OF THE RESPECTIVE ANNUAL AND QUARTERLY FINANCIAL REPORTING PERIODS ENDED BETWEEN DECEMBER 31, 2015 AND 2016 IN VIOLATION OF GAAP AND SEC ACCOUNTING-RELATED REPORTING RULES

102. Given that by December 31, 2015, there was substantial doubt that the Shenandoah project would be economically viable (*i.e.*, Condition 3), Anadarko's continued capitalization of Shenandoah-related assets beginning as of December 31, 2015 through the financial reporting period ended December 31, 2016, violated GAAP. Specifically, from the financial reporting periods between December 31, 2015 and December 31, 2016, Anadarko improperly reported between \$769.8 million and \$786.6 million of Shenandoah related assets within its balance sheet.¹⁸⁰ These assets included each of the above noted amounts:¹⁸¹

\$ in millions	12/31/15	3/31/16	6/30/16	9/30/16	12/31/16
Non-Producing Leasehold Asset	\$462.7	\$462.7	\$458.4	\$458.4	\$458.4
Suspended Well Costs	\$260.2	\$261.5	\$259.8	\$252.6	\$255.2
Capitalized Interest	\$46.9	\$54.0	\$61.7	\$68.0	\$69.0
Asset Retirement Obligations	\$0.0	\$0.0	\$0.0	\$0.0	\$4.0
Total	\$769.8	\$778.2	\$779.9	\$779.0	\$786.6

¹⁸⁰ 2016.12.31 GG.4.A.8.10 SW AGING AND NET CHANGE, KPMG_APC_0008143; 2016.09.30 Q3.GG.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0007376; 2016.06.30 Q2.GG.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0007189; 2016.01.19 GG.4.A.8.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0006098; 2016.12.31 GG.4.B.1.10 NPLH ROLLFORWARD, KPMG_APC_eA_0007983; 2016.03.31 Q1.GG.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0007094; 2014.12.31 GG.4.B.1.10 Q4 NPLH ROLLFORWARD, KPMG_APC_eA_0002543; 2014.12.31 GG.4.A.8.10 SW AGING, KPMG_APC_eA_0002531.

¹⁸¹ 2016.12.31 GG.4.A.8.10 SW AGING AND NET CHANGE, KPMG_APC_0008143; 2016.09.30 Q3.GG.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0007376; 2016.06.30 Q2.GG.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0007189; 2016.01.19 GG.4.A.8.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0006098; 2016.12.31 GG.4.B.1.10 NPLH ROLLFORWARD, KPMG_APC_eA_0007983; 2016.03.31 Q1.GG.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0007094; 2014.12.31 GG.4.B.1.10 Q4 NPLH ROLLFORWARD, KPMG_APC_eA_0002543; 2014.12.31 GG.4.A.8.10 SW AGING, KPMG_APC_eA_0002531.

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103. As discussed hereafter, Anadarko's related overstatement of Shenandoah's related assets beginning December 31, 2015 and corresponding disclosure omissions were material to the Company's respective financial statements filed on Forms 10-K and 10-Q.

1. *Anadarko's Overstatement of Shenandoah's Suspended Well Costs and Non-Producing Leasehold Assets and Other Related Assets and Corresponding Disclosure Omissions Beginning December 31, 2015 Were Material*

104. The Company's related misstatement and disclosure omissions were material to each of Anadarko's respective financial reporting periods beginning December 31, 2015 and ended December 31, 2016. In this regard, Anadarko's recurring misstatement exceeded well-established SEC quantitative materiality example benchmarks (*i.e.*, 5% of an item).

105. For example, Anadarko's misstatement exceeded 5% of the following relevant disclosed amounts (*i.e.*, Revenue, Oil and condensate sales, Operating income (loss), and Income (loss) before taxes) using both the rollover approach (*e.g.*, FY 2015), and the iron curtain approach (*e.g.*, Q1 2016 through FY 2016).¹⁸²

Percentage Impact of Misstatements on Various Financial Metrics						
	FY 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	FY 2016
Total Revenue and Other	9%	46%	41%	41%	33%	10%
Oil and condensate sales	14%	92%	69%	63%	54%	17%
Operating Income (Loss)	9%	90%	235%	98%	129%	30%
Income (Loss) Before Taxes	8%	56%	84%	77%	152%	21%

¹⁸² **Note:** Pursuant to required use of the iron curtain and rollover methods, these calculations evaluate Anadarko's ongoing failure to expense Shenandoah-related suspended well costs and unproved property costs, including the unrelated misstatement across the various periods presented. Note that as Shen-3 well costs were not expensed until Q3 2016, the misstatement percentages included such costs during FY2015 through Q2 2016. These percentages were calculated using Offshore Exposure - Dec 2014 Final Suspended & Drilling, APC-00156333; 2015.04.20 Q1.GG.10SW AGING AND NET CHANGES - 04.20, KPMG_APC_0021079; 2015.07.14 Q2.GG.10 SW AGING, KPMG_APC_0009967; 2015.10.14 Q3.GG.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0003445; 2016.01.19 GG.4.A.8.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0006098; 2016.03.31 Q1.GG.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0007094; 2016.06.30 Q2.GG.10 SW AGING AND NET CHANGE, KPMG_APC_eA_0007189; September 30, 2016 Dry Hole Expense, KPMG_APC_eA_0008256 and reported financial statement amounts included in Anadarko's 2014 Form 10-K; Current Report on Form 8-K filed February 2, 2015, Q1 2015 Form 10-Q; Q2 2015 Form 10-Q; Q3 2015 Form 10-Q; 2015 Form 10-K; Current Report on Form 8-K filed February 1, 2016; Q1 2016 Form 10-Q; Q2 2016 Form 10-Q; Q3 2016 Form 10-Q.

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106. As noted above, while the assessment of quantitative factors is necessary and provides a preliminary basis for establishing the materiality of Anadarko's misstatements and disclosure omissions, the consideration of qualitative factors further supports my opinion that the Company's Shenandoah-related misstatements were material. Moreover, qualitative factors do not override the conclusion that Anadarko's misstatements were material quantitatively, and thus material for financial reporting purposes.¹⁸³
107. For example, the misstatement concerned a portion of Anadarko's business (its oil exploration and development segments) that had a significant role in the Company's current and future operations or profitability. As discussed above beginning in paragraph 80, Anadarko repeatedly asserted the potential significance of the Shenandoah project on the Company's future operations and profitability. Prior to the to the end of Q1 2017, Anadarko continued to assert the success of certain wells and the implicit possibility of future economic benefit of its Shenandoah-related investments. The relevance of these statements to the Company's future operations and profitability further supports the materiality of Anadarko's misstatement and related disclosure omissions.
108. Specifically, in addition to the disclosures through December 31, 2014 described above and after December 31, 2015, in contrast to Condition 3, Anadarko continued to emphasize the significance of Shenandoah in the Company's earnings releases and other disclosures. For example:
- a. On February 2, 2016, Mr. Daniels asserted Anadarko's contentment with the results of Shenandoah-4 and the "high expectations" the Company had for Shenandoah-5:

We're very pleased with it. We also were able to get about 550 feet of core. That's important for planning what that development could look like. So that's going to be analyzed, turned over to the reservoir engineers as they put together a scenario for how we might develop that.

¹⁸³ I have considered relevant qualitative factors, including those specifically listed in ASC 250-10-S99 that are described as "considerations that may well render material a quantitatively small misstatement of a financial statement item" when making this determination.

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At the same time, we're looking at **drilling Shenandoah 5. ... We have high expectations for it**, but we need to drill the well and see. That's what appraisal is all about.

Meanwhile, the guys are taking all the information that we obtained from this, rolling it into conceptual planning as to what resources we may be able to recover, how much it might cost, those types of things. As Al said, we're a long ways from sanction at this point. **If Shenandoah-5 is successful, we may move even farther to the east with a Shenandoah-6, but of course that will be all dependent on what happens at Shenandoah-5.**¹⁸⁴

- b. Two weeks later, Mr. Daniels reiterated the Company's prior successful wells and the advancement being made on the Shenandoah project by Anadarko, asserting:

On Shenandoah, I don't think that we have a price deck right now that says it would be economic at this because right now, you're still in cost deflation, whether it's on drilling rigs, whether it's on construction cost and your services. ... We're planning on appraising it this year, the Shenandoah #5 well will be drilled and that will be off to the east, again, trying to prove lateral extent, that kind of thing. **We did appraise it last year. We had successful wells, 620 feet of pay in that. So we still are advancing the project, but we're a ways away from a sanction at Shenandoah.**¹⁸⁵

- c. On May 11, 2016 Mr. Leyendecker EVP of Exploration affirmed that Anadarko was continuing to praise the Company's "**fantastic Shenandoah discovery.**"¹⁸⁶
- d. On May 24, 2016 Shandell Szabo, Anadarko's former Onshore Exploration Manager and Director of Investor Relations, characterized Shenandoah as "the finest lower-tertiary discovery to date in the Gulf of Mexico" and commented on its potential:

I think when you look at Shenandoah, **it goes without saying that it is the finest lower-tertiary discovery to date in the Gulf of Mexico.** And I say that because of a few reasons. When you're looking at these resource, potentially, you look at a couple of things: One, you look at thickness; two, you look at area; and then three, recovery factor.

¹⁸⁴ Q4 2015 Earnings Call, February 2, 2016, p. 9 (emphasis added).

¹⁸⁵ Anadarko Conference Presentation, February 24, 2016, p. 8 (emphasis added).

¹⁸⁶ Anadarko Conference Presentation, May 11, 2016, p. 7 (emphasis added).

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And when you look at this log, and you can see that hundred foot scale bar on there. That's 1,000 feet of sand full of hydrocarbons. So that's one. It's extremely thick.

Two, when you look at the scale across those blacks, and you can see the northern part there, this spans 9 miles. Those are 3-mile blocks. So you're talking about something that has a lot of area, which is really the biggest driving factor when you talk about size.

And then the last thing is the recovery of this. And so this particular discovery has Miocene-like properties, which means that the reservoir quality is very good. You're looking at [indiscernible] up to 25% here. You're looking at permeabilities in the 100 millidarcy range. Some of the individual sand sees 300, 400 millidarcy perm.

And then the last thing you look at is the fluid properties. It's very light oil out here.

So from the overall discovery, it's got everything that you're looking for. We just -- as Bob mentioned, we just finished -- we're just about to finish up the #5 well, so we can't reveal exactly what's going on there. But what I would say is that it looks a whole heck of a lot like the log that you're looking at right here. And when you look at where that falls on that cross section, you can see the #5 well up there on that cross section. So you can see that lighter green color, we're going to be able to turn that dark green. So the lighter green on there is the probable and the darker green is the proven. **And so we're going to have the ability for that large area over there to go ahead and say, "Yes, that's proven." That's tremendous for us.**¹⁸⁷

- e. On June 28, 2016, Anadarko's President Robert Gwin, affirmed the Company's excitement following Shenandoah-5, including Anadarko's resulting "enthusiasm" for Shenandoah as a "tremendous resource potential:"

[W]e're very excited to be working toward completing the Shenandoah #5 well. Some of you may have heard some comments we've made in the past there. I don't have the log here, the #2 appraisal well, which had over 1,000 feet of net pay that we announced I think it was now a couple of years ago. **But Shenandoah-5, at least in the uphole sections, we talked about the fact that it looked a lot like Shenandoah-2. A lot of enthusiasm around our activities here because of Shen-5.** The results of Shen-5 have put us in a position where we clearly expect to drill Shen-6 later this year and

¹⁸⁷ Anadarko Conference Presentation, May 24, 2016, p. 9 (emphasis added).

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continue with an appraisal program there ... **Something like a Shenandoah is obviously tremendous resource potential, but the development plan could be from a relatively smaller spar opportunity to maybe multiple spars to something bigger that you might pursue.**¹⁸⁸

- f. On September 14, 2016, Mr. Gwin reiterated his excitement and referred to Shenandoah as a “great opportunity” for the company:

The real advantages is the infrastructure and capacity of that infrastructure. And so a lot of people focus on, well, when are we going to see greenfield development and at what price, et cetera, and **we still got a great opportunity at the Shenandoah we’re excited about.** And so we ask ourselves those questions all the time, right? We’re working at answering it. **But you don’t need material commodity price improvement to make money in the Gulf of Mexico.** We’re doing it at strip and we think we can continue to do it at strip for a long time to come.¹⁸⁹

109. The write-off of Anadarko’s Shenandoah suspended costs described in paragraph 102 above would have also had a pervasive impact on other aspects of Anadarko’s disclosures within its Annual and Quarterly Reports on Forms 10-K and 10-Q, during the periods between December 31, 2015 and December 31, 2016. These additional disclosures are seen in Anadarko’s Management’s Discussion and Analysis of Financial Condition and Results of Operations (“MD&A”) as called for under Item 303 of Regulation S-K¹⁹⁰ in its Q1 2017

¹⁸⁸ Anadarko Conference Presentation, June 28, 2016, p. 9 (emphasis added).

¹⁸⁹ Anadarko Conference Presentation, September 14, 2016, p. 9 (emphasis added).

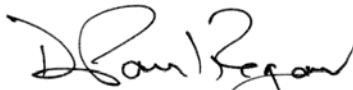
¹⁹⁰ Item 303 of Regulation S-K (Item 303) requires public companies to include a discussion of the results of operations, liquidity, and other information necessary to an understanding of the registrant’s financial condition. This discussion is presented in a single section referred to as Management’s Discussion and Analysis of Financial Condition and Results of Operations (MD&A). The MD&A section is expected to provide “material historical and prospective textual disclosure enabling investors and other users to assess the financial condition and results of operations of the registrant. SEC Release No. 33-6835. Amongst other disclosures, the SEC’s Regulation S-K Item 303 required the following accounting-related MD&A disclosures for annual period: (1) Item 303(a): The discussion shall provide information as specified in paragraphs (a)(1) through (5) of this Item and also shall provide such other information that the registrant believes to be necessary to an understanding of its financial condition, changes in financial condition and results of operations... Where in the registrant’s judgment a discussion of segment information and/or of other subdivisions (e.g., geographic areas) of the registrant’s business would be appropriate to an understanding of such business, the discussion shall focus on each relevant, reportable segment and/or other subdivision of the business and on the registrant as a whole.” and (2) Item 303(a)(3)(i): “Describe any unusual or infrequent events or transactions or any significant economic changes that materially affected the amount of reported income from continuing operations and, in each case, indicate the extent

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Quarterly Report on Form 10-Q and its 2017 Annual Report on Form 10-K. In those Forms filed with the SEC, Anadarko's management explained the significant increases in the Company's dry hole expense and impairment of unproved properties.¹⁹¹ As a result of the misstatements at issue, similar Shenandoah-specific disclosures should have been presented in Anadarko's MD&A's included in the Company's respective Forms 10-K and 10-Q filed for those financial reporting periods between December 31, 2015 and December 31, 2016. However, as the suspended costs were not properly expensed as discussed above, these disclosures required under Item 303 of Regulation S-K were improperly omitted from the Company's respective annual and quarterly reports.

110. Given the quantitative significance of the misstatements described above, as further supported by the indicated significance of the Shenandoah basin project as made evident by the Company's aforementioned statements and disclosures, Anadarko's failure to impair and expense related project costs as of and between December 31, 2015 and December 31, 2016, was material.

Respectfully submitted November 9, 2022,


D. Paul Regan, CPA/CFF

to which income was so affected. In addition, describe any other significant components of revenues or expenses that, in the registrant's judgment, should be described in order to understand the registrant's results of operations." Item 303(c) requires similar disclosures for interim (quarterly) periods. *See also* SEC Release No. 33-8350, SEC Financial Reporting Manual §9220.

¹⁹¹ Anadarko 2017 Form 10-K, pp. 66-67; Anadarko Q1 2017 Form 10-Q, p. 37.

Exhibit A - Documents and Other Information Considered in Forming Opinions
Confidential

I have relied on all of the documents cited in my report, including the text and footnotes therein. In addition to these documents, I have also listed below other documents that I considered in preparing my report.

Relativity Documents

As part of my assignment, I was given access to electronic databases (i.e. Relativity Platform) containing relevant information including documents produced by defendants and third-parties.

Bates Stamped Documents (beginning bates only):

ANACOP00000354

ANACOP00025913

APC-00001289

APC-00001791

APC-00001795

APC-00001801

APC-00001803

APC-00001829

APC-00001863

APC-00001866

APC-00001867

APC-00001928

APC-00002563

APC-00002814

APC-00003195

APC-00004967

APC-00005093

APC-00005094

APC-00005095

APC-00009644

APC-00013459

APC-00025532

APC-00060382

APC-00147963

APC-00152617

APC-00156333

APC-00158152

APC-00290058

APC-00307805

APC-00572955

APC-00617381

APC-00617383

APC-00863988

Exhibit A - Documents and Other Information Considered in Forming Opinions
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APC-01283759
APC-01396003
APC-01396065
APC-01699536
APC-01699656
APC-01720564
APC-01737346
APC-01751288
KPMG_APC_0008143
KPMG_APC_0009967
KPMG_APC_0021079
KPMG_APC_0027263
KPMG_APC_eA_0002511
KPMG_APC_eA_0002531
KPMG_APC_eA_0002543
KPMG_APC_eA_0003043
KPMG_APC_eA_0003262
KPMG_APC_eA_0003349
KPMG_APC_eA_0003445
KPMG_APC_eA_0003451
KPMG_APC_eA_0006079
KPMG_APC_eA_0006098
KPMG_APC_eA_0007094
KPMG_APC_eA_0007100
KPMG_APC_eA_0007189
KPMG_APC_eA_0007376
KPMG_APC_eA_0007469
KPMG_APC_eA_0007566
KPMG_APC_eA_0007983
KPMG_APC_eA_0008256
KPMG_APC_eA_0008355
KPMG_APC_eA_0008461
KPMG_APC_eA_0008471
KPMG_APC_eA_0009163

SEC Filings

Anadarko 2007-2017 Annual Reports on Form 10-K and Exhibits
Anadarko Current Report on Form 8-K dated January 31, 2017
Anadarko Current Report on Form 8-K dated February 1, 2016
Anadarko Current Report on Form 8-K, February 2, 2015
Anadarko Proxy Statement on Form Def 14A, March 18, 2016
Anadarko Proxy Statement on Form Def 14A, March 23, 2015

Exhibit A - Documents and Other Information Considered in Forming Opinions
Confidential

Anadarko Q1 2012 - Q3 2017 Quarterly Reports on Form 10-Q and Exhibits
Cobalt 2014 Annual Report on Form 10-K
Conoco 2014 Annual Report on Form 10-K
Marathon 2014 Annual Report on Form 10-K

Anadarko Transcripts & Presentations

2014 Anadarko Investor Conference Presentation, March 4, 2014
2015 Anadarko Investor Conference Call Presentation, March 3, 2015
Anadarko Conference Presentation, February 24, 2016
Anadarko Conference Presentation, June 28, 2016
Anadarko Conference Presentation, May 11, 2016
Anadarko Conference Presentation, May 24, 2016
Anadarko Conference Presentation, September 14, 2016
Company Conference Presentation, May 20, 2014
Company Conference Presentation, May 22, 2013
Company Conference Presentation, November 13, 2014
Company Conference Presentation, November 22, 2013
Company Conference Presentation, September 12, 2013
Earnings Guidance Update Call, March 3, 2015
Q1 2013 Earnings Call, May 7, 2013
Q1 2014 Earnings Call, May 6, 2014
Q2 2013 Earnings Call, July 30, 2013
Q3 2014 Earnings Call, October 29, 2014
Q4 2013 Earnings Call, February 4, 2014
Q4 2015 Earnings Call, February 2, 2016
Q4 and Full Year 2014 Earnings Call, February 3, 2015
Shareholder/Analyst Call, February 20, 2013

Accounting and Auditing Guidance, SEC Rules and Related

17 CFR § 210.12b-2
17 CFR § 210.12b-20
17 CFR § 210.4-01
AICPA Audit and Accounting Guide, Entities with Oil and Gas Producing Activities – Clarified (Updated As of January 1, 2014)
AICPA Statement on Standards for Forensic Services
ASC Master Glossary
ASC Topic 105 - Generally Accepted Accounting Principles
ASC Topic 250 - Accounting Changes and Error Corrections
ASC Topic 360 - Property, Plant, and Equipment
ASC Topic 450 - Contingencies
ASC Topic 932 - Extracting Activities - Oil and Gas
Deloitte Oil and Gas, Accounting, Financial Reporting, and Tax Update, January 2016

Exhibit A - Documents and Other Information Considered in Forming Opinions
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FASB Accounting Concept Statement No. 6
FASB Accounting Standards Codification (ASC) Topic 105
FASB FAS No. 25, Suspension of Certain Accounting Requirements for Oil and Gas Producing Companies - An Amendment of FASB Statement No. 19
FASB Staff Position, FAS 19-1: Accounting for Suspended Well Costs
FASB Statement of Financial Accounting Standards (FAS) No. 19, Financial Accounting and Reporting by Oil and Gas Producing Companies
Federal Trade Commission, Informal Staff Advisory Opinion 02-4
PCAOB AS 1001, Responsibilities and Functions of the Independent Auditor
PCAOB AS 1015, Due Professional Care in the Performance of Work
PCAOB AU 110, Responsibilities and Functions of the Independent Auditor
PCAOB AU 411, The Meaning of Present Fairly in Conformity With Generally Accepted Accounting
SEC Regulation S-K, Item 303
SEC Financial Reporting Manual, updated as of August 25, 2015, Topic 9 - Management's Discussion and Analysis of Financial Position and Results of Operations (MD&A), 9200 General requirements
SEC Release No. 33-8350
SEC Release No. 33-6835
SEC Securities Act Release No. 6349
SEC Staff Accounting Bulletin No. 108
SEC Staff Accounting Bulletin No. 99
Todd E. Hardiman, Associate Chief Accountant, SEC Division of Corporation Finance, "Remarks before the 2007 AICPA National Conference on Current SEC and PCAOB Developments," December 11, 2007

Deposition(s) and Exhibits

Deposition of Catherine Green and Exhibits
Deposition of Darrell Hollek and Exhibits
Deposition of Ernest Leyendecker and Exhibits
Deposition of Lea Frye and Exhibits
Deposition of Patrick McGrievy and Exhibits
Deposition of Paul Chandler and Exhibits
Deposition of R.A. Walker and Exhibits
Deposition of Robert Gwin and Exhibits

Miscellaneous Documents (Articles, other written works, etc.)

Amended Complaint, No. 4:20-cv-00576 (S.D. Tx.).
Stipulation Concerning Expert Discovery, September 27, 2022
<https://finance.yahoo.com/quote/CL%3DF>
<https://www.sec.gov/about/what-we-do#section1> (accessed November 7, 2022)



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177 Bovet Road, Suite 525
San Mateo, CA 94402
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Employment & Education

2012 – Present	<p>Hemming Morse, LLP</p> <p>Certified Public Accountants, Forensic and Financial Consultants</p> <p>Chairperson, 2012-2016</p> <p>Partner, since 2012</p>
1975 – 2011	<p>Hemming Morse, LLP</p> <p>Certified Public Accountants, Forensic and Financial Consultants</p> <p>Chairman of the Board, 2001-2011</p> <p>President, 2001-2009</p> <p>Director-in-charge of the firm's Litigation and Forensic Consulting Practice, 1975-2006</p>
2006	<p>Stanford Law School</p> <p>Executive Education - Directors' College</p>
1979	<p>Golden Gate University, San Francisco</p> <p>M.S. Accounting</p>
1973 – 1975	<p>Regan & Skelton, CPAs</p> <p>Partner</p>
1970 – 2018	<p>Taught or attended at least 80 hours of qualified continuing education courses in each 2 year period in order to renew CPA license</p>
1968 – 1973	<p>Peat, Marwick, Mitchell & Co., CPAs</p>
1968	<p>University of San Francisco</p> <p>B.S. Accounting (Accounting Specialist)</p>



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Professional & Service Affiliations

- Certified Public Accountant, State of California
 - Since 1970
- American Institute of Certified Public Accountants
 - Since 1970
 - Council Member, 2003-2011
 - Member, Forensic & Valuation Services Executive Committee, 2008-2011
 - Member, Litigation and Dispute Resolution Services Subcommittee, 1998-2001
 - Chair of National Economic Damages Committee, 1999-2001
 - National Computer Audit Subcommittee of the Auditing Standards Board, past member
- California Society of Certified Public Accountants Distinguished Service Award, 2009
- Certified in Financial Forensics
 - Since 2008
- California CPA Education Foundation
 - Board of Trustees, 1997-2003
 - President, 2001-2002
 - First Vice President, 2000-2001
 - Treasurer, 1999-2000
- California Society of Certified Public Accountants, Board of Directors, 2001-2006
 - Council, since 2001
 - Chair, 2004-2005
 - First Vice President, 2003-2004
- California Society of Certified Public Accountants, Litigation Consulting and Dispute Resolution Services Common Interest Member
 - Steering Committee, since 1990
 - Chair, 2002-2004
 - Vice President, 2000-2002
- California Society of Certified Public Accountants, State Economic Damages Section
 - Chair, 1996-1998
 - Member, since 1995
- California Society of Certified Public Accountants, Quality Control Committee, past member
- California Society of Certified Public Accountants, Litigation Services Conference Chair, 1990
- California Society of Certified Public Accountants, Advanced Litigation Forum Planning Committee, 1991-1993; 1995 and 1997
 - Chair, 1993 and 1997
- California Society of Certified Public Accountants, Computer Show and Conference Chair, 1985
- California Society of Certified Public Accountants, Economic Damages Conference Planning Committee, 2000
- American Arbitration Association's National Panel of Arbitrators, 1983-1996



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Professional & Service Affiliations continued

- Western Association of Accounting Firms Audit and Accounting Committee
 - Chairman, 1980-1982
 - Audit and Accounting Manuals, Editor, 1979-1982
- CPA Computer Report, Editorial Board, 1984-1987
- Board of Trustees, Golden Gate University, 2002-2013
 - Audit Committee member, since 2005
 - Audit Committee Chair, 2005-2008
- Board of Trustees, Jesuit School of Theology at Berkeley, 2002-present
 - Audit Committee member and Chair, 2004-2011
- International Display Works, Inc.,
 - Board of Directors, 2004-2006
 - Audit Committee member, 2005-2006
- Solar Power, Inc.,
 - Board of Directors, 2006-2010
 - Audit Committee Chair, 2006-2010
- Catholic Charities CYO of the Archdiocese of San Francisco
 - Board of Directors, 2009-present
 - Audit Committee Chair, since 2009
- Town of Hillsborough
 - Council Member, 1998-2010
 - Mayor, 2002-2004
 - Vice Mayor, 2000-2002
 - Commissioner of Finance, 1998-2002; 2004-2010
 - Financial Advisory Committee, since 2011
- Hillsborough City School District
 - Board of Trustees
 - Trustee, 1985-1995
 - President, 1986-87; 1993-94
- Hillsborough Recreation Commission, 1989-1993; 1998-2010
 - President, 1990-1993
- Citizen of the Year, 1995
Town of Hillsborough, California



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Courses Written and Presented

AICPA & California Society of CPAs

- "Candid Advice on Expert Witness Best Practices" California Society of CPAs, Fraud and Forensics Virtual Conference, 2022
- "Fraudulent Financial Reporting and Accountants' Malpractice" California Society of CPAs, 4N6: Forensics and Fraud Virtual Conference, 2021
- "Economic Damages: Common Frameworks By Industry & Claim Type" AICPA National Forensic Accounting Conference, Boston, MA, 2010
- "Fraud Prevention and Detection" California Society of CPAs, Business and Industry Conference, Los Angeles and San Francisco, CA, 2004
- "Trigon Insurance Co. v. United States" California Society of CPAs, Economic Damages Litigation Section, San Francisco, CA, 2003
- "Issues Re: Revenue Recognition" California Society of CPAs, Litigation Sections Steering Committee, Burlingame, CA, 2003
- "Trashing Drafts - A Standard Practice or a Dangerous Proposition?" California Society of CPAs, Advanced Business Litigation Institute, Palm Springs, CA, 2003
- "Aggressive Accounting & The Games People Play" AICPA Webcast, co-author, NJ, 2003
- "Mistakes Made in the Work Product" California Society of CPAs, Litigation Services Conference, Irvine, CA, 2002
- "Complex Litigation/Accounting Malpractice" AICPA National Fraud Conference, Las Vegas, NV, 2002
- "Ethics, Taxes and Financial Reporting" California Society of CPAs, San Francisco, CA, 2002
- "Expert Disqualifications" California Society of CPAs, Advanced Economic Damages and Business Valuation Conference, Palm Springs, CA, 2001
- "Financial Statement Fraud" California Society of CPAs, Fraud Conference, San Francisco and Los Angeles, CA, 2000
- "Quantifying Losses" AICPA National Fraud Conference, Las Vegas, NV, 2000
- "Electronic Work Product-Discovery Issues" California Society of CPAs, Economic Damages Conference for Business Trial Lawyers & Experts, Los Angeles, CA, 1999
- "The CPA's Role in Construction Damages" AICPA National Advanced Litigation Conference, Atlanta, GA, 1999
- "Significant Frauds of our Time" AICPA National Fraud Conference, Las Vegas, NV, 1998



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Courses Written and Presented continued

AICPA & California Society of CPAs continued

- “Daubert and the CPA Expert” California Society of CPAs, Advanced Economic Damage Conference, San Francisco, CA, 1998
- “The Accountant in Fraud Investigations” California Society of CPAs, Fraud Conference, San Francisco and Los Angeles, CA, 1997
- “Rule 26 Reports,” “The Auditor and Fraud,” and “Challenging Questions” California Society of CPAs, Advanced Litigation Forum, Palm Springs, CA, 1996
- “Distinguishing Between Litigation and Attest Engagements” California Society of CPAs, Advanced Litigation Forum, San Diego, CA, 1995
- “Miniscribe Trial Binder” California Society of CPAs, Advanced Litigation Forum, Monterey, CA, 1993; Litigation Consulting Services Committee, Puerto Vallarta, MX, 1993; Litigation Consulting Services Committee, San Francisco, CA, 1994
- “Lost Profits” California Society of CPAs, Litigation Services Conference, San Francisco and Los Angeles, CA, 1991
- “Opportunities Update: “A Discussion of Disruption Claims” California Society of CPAs, Litigation Consulting Conference, Los Angeles, CA, 1990
- “Construction Damages” AICPA, Second Annual Conference on CPA’s Role in Litigation Services, Dallas, TX and Washington, DC, 1990

Selected Others

- “Fraudulent Financial Reporting and Accountant’s Malpractice” San Francisco State University, 2019
- “The Fraud Triangle - Where Were the Gatekeepers” United States District Court, Northern District Historical Society, San Francisco, CA, 2012
- “Introduction of Financial Forensic Accounting” Golden Gate University, Adjunct Professor, 2009-present
- “Reporting in Litigation Engagements” “Wage & Hour Litigation” Golden Gate University, 2009
- “Intellectual Property Damages” Federal Bureau of Investigation, Quantico, VA, 2001
- “Alternative Dispute Resolution Techniques and Strategies for the Small and Emerging Contractor” American Bar Association, Fourth Annual Construction Institute, 1995
- “Fundamentals of Forensic Accounting” Georgetown University, Washington, DC, 1994



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Courses Written and Presented continued

Selected Others continued

- "Proving and Pricing Delay and Disruption Claims" Andrews Conference - Fourth Annual Construction Litigation Superconference, San Francisco, CA, 1989
- "The Auditor in Court" State of California, Government Auditors, 1989
- "Pricing Construction Claims" Thelen, Marrin, Johnson & Bridges, 1988
- "Dollars and Sense: Building Your Damages Case & Surviving a Daubert Challenge" San Francisco Trial Lawyers Association, Litigation Practice, San Francisco, CA, 2007
- "Winning Strategies for the Financial Side of Your Damages Case" Construction Infrastructure Summit, Phoenix, AZ, 2007

Publications

- "Our Roots Run Deep" California CPA Magazine, August 2004
- "Expert Witnesses: Do They Have to Keep Draft Reports?" California CPA Magazine, May 2004
- "Revenue Recognition: Now, Later or Never?" California CPA Magazine, September 2003
- AICPA Litigation Services and Applicable Professional Standards Consulting Services Special Report 03-1 (Contributing author)
- Litigation Services Handbook, "The Role of the Accountant as Expert Witness," published by John Wiley & Sons, Chapter 16, "Litigation Consulting: Construction Claims"
- Litigation Support Report Writing, published by John Wiley & Sons, Chapter 15, "Construction Claims"
- Member of the Editorial Board and author of various articles for the California Society of CPAs' Litigation and Dispute Resolution Services Section's quarterly publication (since summer 1996)
- Outlook Magazine, Winter 1985 - Computer Show and Conference Survey
- "California CPA Computer Show and Conference," CPA Computer Report, September 1985
- "Direct and Cross Examination of Experts," co-author of case study presented by University of California Hastings Litigation Advocacy Program



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Testimony (Presented in the Last Four Years)

Trial

- Doug Ridley and Sherry Shen v. Rancho Palma Grande HOA (2022), Superior Court of California, Santa Clara County, Case No. 19CV349909
- Port of Ridgefield vs. Union Pacific Railroad Company (2018) U.S. District Court Western District of Washington at Tacoma, Case No. 3:14-CV-06024-RBL

Deposition

- Lehigh Southwest Cement Company v. James Hardie Building Products (2019) (2022), Superior Court of California, Shasta County, Case No. 191110
- Strathclyde Pension Fund, et al. v Bank OZK, et al. (2021) U.S. District Court, Eastern District of Arkansas Case No. 4:18-cv-00793-DPM
- Doug Ridley and Sherry Shen v. Rancho Palma Grande HOA (2022), Superior Court of California, Santa Clara County, Case No. 19CV349909
- In re: Novo Nordisk Securities Litigation (2021) U.S. District Court, District of New Jersey Case No. 3:17-CV-209-BRM-LHG
- Snow Covered Capital, LLC v. William Weidner et al. (2021) United States District Court, District of Nevada Case No.: 2:19-cv-00595—JAD-NJK
- 246 Atherton Avenue LLC v. Trais Fluors LLC (2019) Superior Court of California, San Mateo County Case No. 16-CIV-02957
- Strathclyde Pension Fund, v. Bank OZK and George Gleason (2021), United States District Court, Eastern District of Arkansas, Central Division Case No. 4:18-cv-00793-DPM
- The Regents of the University of California v. Paul S. Aisen, et al. (2019) Superior Court of California, San Diego County, Case No. 37-2015-00022082-CU-BT-CTL
- In re: Teva Securities Litigation (2021) U.S. District Court, District of Connecticut Case No. 3:17-cv-00558 SRU
- Mark Smilovits, et al. v First Solar, Inc., et al. (2019) U.S. District Court District of Arizona Case No. 2:12-cv-00555-DGC
- Robert Pestoni v. Linda Sereni (2018) JAMS, Ref No. 1100090112



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Deposition continued

- Port of Ridgefield vs. Union Pacific Railroad Company
(2018) U.S. District Court Western District of Washington at
Tacoma, Case No. 3:14-CV-06024-RBL
- Layton Construction Co., Inc. v. Mint Development, L.P.
et al. (2018) Superior Court of California County of San
Francisco, Case No. CGC-15-549603

Arbitration

- Robert Pestoni v. Linda Sereni (2018)
JAMS, Ref No. 1100090112